



Institute of Criminal Justice Studies

University of Portsmouth

This thesis is submitted in partial fulfilment of the requirements for the award of the degree of Doctor of Security and Risk Management of the University of Portsmouth.

The plight of the planner: A consideration of the quality and consequent utility of the literature on business continuity/resilience (BCR) to inform 'professional' practice.

Submitted by: Chris Needham-Bennett

Dated :17th July 2018

Revised: 11th July 2019

Declaration

Whilst registered for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other award.

Word count 48,965 Revised wordcount 54,537

Signed: *Chris Needham-Bennett*

Dated: 17th July 2018 and 11th July 2019

Abstract

Business continuity management, or resilience as it is increasingly known, has blossomed over the last 20 years. It has become an audited, regulated and standardised business process which is taught at both undergraduate and post graduate levels in several UK universities. There has been a corresponding growth in the available literature too. The literature encompasses a body of academic literature that can be applied indirectly to professional practice. However, most of the influential work is 'grey' literature, namely standards, best practice advice and self-help manuals. The representative institute in the UK, the Business Continuity Institute (BCI), now claims over 8,000 members worldwide, publishes several articles, including a 'best practice guide' and has influenced the development of several international standards (ISOs). The BCI is embarked on what scholars have described as a 'professional project' and presents the activity of its practitioners as encompassing a defined profession.

The aim of the thesis, as described in the title, is to consider the quality and utility of the extant literature to inform 'professional' practice. The supporting objectives are: to critically review the various categories of literature, to examine the concept of professionalism in relation to the literature, and to assess the degree to which the literature might be improved. Adopting the term 'business continuity/resilience' (BCR) to describe this professional field, it provides a review of influential literature in BCR. The examination of both academic and 'grey' literature reveals a degree of difficulty in applying academic works to practice, a paucity of authority in the standards with an iterative self-referenced process based on custom and practice, and a dearth of combined academic/praxis inquiry.

It is argued that at present Business Continuity falls short of being a profession. In particular, it lacks a knowledge base. This poses a problem for practitioners. Their 'plight' is the discernment of good quality material on which to base their business continuity plans. Academic work is shy of quantitative studies in establishing the efficacy of the processes, albeit that BCI publications and ISO standards make sweeping claims as to their efficacy, and self-help books are replete with hyperbole. It leaves the BCR practitioner with insufficient knowledge on which to establish a paradigm for their practice.

The work concludes with a consideration of other disciplines' more successful attempts to academically validate their activities and utilise academic work in practice. This is particularly the case for the long-established literature on military doctrine, which could influence BCR to a larger extent than, is currently assumed. It is argued that military sources can be seen as BCR's 'lost cousin'. Military doctrine formats can be applied to BCR at several levels, but this thesis considers the level of doctrine in respect of principles and paradigm building that might inform, inspire or assist the BCR practitioners in various settings.

Contents

List of Abbreviations	6
List of Tables and Figures	7
Chapter 1 Introduction.....	8
Background.....	8
The research aims and objectives	11
Outline of chapters	11
Chapter 2 Research methodology.....	15
Introduction.....	15
The research design.....	15
The research process	21
The research experience.....	29
Conclusion	31
Chapter 3 Understanding BCR.....	34
Introduction.....	34
An historical context	34
The semantic debates	35
Contextual academic studies.....	39
HM Government directives, BCI advice and regulatory influences	46
Plans and planners in context	49
The development of BCR.....	52
Discussion	53
Chapter 4 BCR as an academically informed profession	55
Introduction.....	55
BCR specific literature.....	55
Significant academic contributions	60
Social Capital And Supply Chain Resilience.....	64
Social Capital.....	65
Supply Chain Criticality.....	66
Explanatory studies.....	72
Discussion	75
Chapter 5 Wider Academic literature germane to planning	77
Introduction.....	77
Plans and efficacy	77
Psychological literature related to planning	80

Planning principles	87
Discussion	91
Chapter 6 BCR best practice guidance.....	94
Introduction.....	94
The context for the analysis	96
Best Practice Guidelines.....	98
International and British Standards.....	101
BCI and HMG supporting publications.....	108
Discussion	116
Chapter 7 Complementary popular literature	119
Introduction.....	119
Research papers.....	119
Advice and reference books.....	123
Discussion	135
Chapter 8 The Maturity of BCR as a profession	137
Introduction.....	137
The nature of professionalism.....	137
The degree to which cognitive commonality has occurred	147
Criteria identified for other related professions	150
Discussion	151
Chapter 9 Conclusion	154
Summary of the findings	154
Implications of the findings.....	156
Recommendations	157
The future	169
References.....	173
Annex A. Ethical Certificate	196

List of Abbreviations

AIRMIC	Association of Insurance and Risk Managers in Industry and Commerce
BCI	Business Continuity Institute
BCM(S)	Business Continuity Management (System)
BC(P)	Business Continuity (Plan)
BCR	Business Continuity Resilience
CCA 2004	Civil Contingencies Act 2004
DR	Disaster Recovery
BS(I)	British Standards (Institute)
ISO	International Standards Organisation
HMG	Her Majesty's Government
JD	Joint Doctrine
GPG	Good Practice Guide
MOD	Ministry of Defence

List of Tables and Figures

List of tables

Table 1. Comparative of literature development.

Table 2. Military principles and their civilian equivalents.

Table 3. Possible development of a paradigm.

List of figures

Figure 1. Literature Sources.

Figure 2. Extract from Joint Doctrine Note 3/11 (2011).

Chapter 1 Introduction

Background

The term ‘business continuity/resilience’ (BCR), selected as the focus of this research is a hybrid term coined by the author to describe the merger of the disciplines of business continuity and resilience. This term was recently implicitly endorsed by the Business Continuity Institute, the representative body for the sector with over 8000 members, in their recent white paper, *Resilience is your competitive advantage*, (BCI 2017a), when they made the retrospective claim on 12th January 2018 that the BCI was,

Founded in 1994 with the aim of promoting a more resilient world, the BCI has established itself as the world’s leading institute for business continuity and resilience...for business continuity and resilience professionals globally... (p.14)

Since then the statement on their website has been updated to refer explicitly to ‘business continuity and resilience professionals.’ (BCI, 2018). As noted by McAslan (2010), Alexander (2013) and demonstrated by the publication of the resilience standard BS 65000 (2014) the use of the term ‘resilience’ has burgeoned over the last few years. Its close association with business continuity was evidenced by Elliott and Johnson¹ (2010) who used ‘resilience’ as the contextual lynchpin of their report on business continuity. This academic endorsement and its frequent practitioner use justifies the use of the term ‘business continuity resilience’ or ‘BCR’ practitioner to describe the role of the planner in the title.

The proposition that BCR is important has never been in question. Two decades ago Burnett (1998, p. 475), trumpeted that “crisis management has become a booming industry.” By implication and association, BCR over the last 20 years has boomed too. As noted by Smith (2006, p.1) writing in Smith and Elliott (2006):

¹ Professor Dominic Elliott now at the University of West of Scotland was Dean of the School of Social Sciences, University of Liverpool where he was the Paul Roy Professor of Strategic Management.

Dr Noel Johnson who is now at Sheffield University Management School was formerly Elliott’s PhD student at the University of Liverpool.

THERE IS LITTLE DOUBT that the notion of crisis has now become an important construct within management – as both an academic discipline and also as a community of practice...There is also considerable overlap... between the related terms 'disaster recovery', 'business continuity' and to an extent 'risk'.
(emphasis in original)

The essence of BCR is the recovery of a business, potential livelihoods and, in some cases, saving lives. For these reasons alone, an inquiry into the quality and resultant utility of the literature to planning would be justified. BCR is also a significant business sector with considerable investment and large opportunity costs, and a financial imperative for determining the knowledge base of BCR is emerging. In common with any profitable business, BCR attracts commentators, contributors and charlatans. Consequently, it becomes essential for the planner to discern good quality advice from 'chaff'. This is especially the case when BCR, despite being a non-regulated activity, has thousands of practitioners, makes claims to professionalism, has developed international standards and maintains its own institute. Consequently, a study of what literature influences the planning process and the eventual plans is of both social and commercial benefit.

The focus of the analysis is informed by Sagan's complaint concerning spurious scientific commentators.

The well-meaning contention that all ideas have equal merit seems to me to be little different from the disastrous contention that no ideas have any merit. (1974, p. xii)

He prefaced this remark using the 19th century term 'paradoxers' to describe those 'who invent elaborate and undemonstrated explanations.' (p. xi). This sentiment reverberates down the decades with Lindstedt (2007) noting that, 'Currently as anyone working in the field is likely to say, it is not well defined by its practitioners and not well understood by its customers'. p 197. Lindstedt summarised his arguments with the controversial proposition 'that there is no well researched evidence that business continuity planning is beneficial'. p.203. Wong (2009, p, 63) suggests that despite a 'myriad of information about its tactical and operational approaches...the role of BCM

at the executive level and the strategic skills of business continuity managers has not been well discussed.’ These views contrast sharply with the marketing of BCR and implies that there could be some very significant ‘elaborate and undemonstrated explanations’ supporting the industry.

This critique can to be applied to much of the literature on business continuity and resilience. Harsh discrimination is needed to winnow the academic wheat from the paradoxer’s chaff. Most academic literature which might validate and inform practice, as is often the case in developing disciplines, has focused on the formation of theories (Boin 2006, p.87). This inductive development of theory commented on by (Pauchant and Douville 1992) was often derived from large scale events. As noted by Reason ²(1997), it privileges more dramatic incidents; oil spills and air crashes have far more visceral appeal than a server failure in a single bank. These dramatic extrapolations often lack resonance with most planners whose concerns are more frequently prosaic and mundane.

Furthermore, it is believed that few planners take very much notice of academic literature even if it has filtered down to them in diluted form, an osmotic concept mooted by Saunders, Lewis and Thornhill (2009). Rather, they appear to be influenced by trade association doctrines, consultants and a plethora of ‘how to do it’ manuals which are therefore considered in the literature review. This raises questions as to whether planners can claim to be professionals. According to the pre-conditions put forward by Larson (1977, p. 40), they are not. She argues that “Cognitive commonality, however minimal is indispensable if professionals are to coalesce into an effective group.” The evident semantic confusion in BCR, noted by Lindstedt (2007)—and inadvertently demonstrated by Buckinghamshire New University (2018) indicates a lack of emergent professionalism. Evidence for this ongoing debate of definitions and consequent lack of coalescence, can be also found in the academic papers of Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum (2008) and Alexander (2013), and in the multiplicity of definitions used by several sources; standards, for example BS 6500 (2014), and self-help books, such as Sterling et al. (2012).

²Reason was Professor Emeritus at the University of Manchester (UoM) and Professor of Psychology at UoM 1977-2001

The research aims and objectives

The aim of this research is to consider the quality and utility of the BCR literature to inform 'professional' practice.

The supporting objectives are: to critically review the various categories of literature, to examine the concept of professionalism in relation to the literature, and to assess the degree to which the literature might be improved.

These objectives which support the aim, whilst simple to address in principle, trail with them clouds of uncertainty. Implicitly they beg the question as to whether the available literature has the power to drive a BCR paradigm without which professionalism of BCR is impossible.

Outline of chapters

The remainder of the thesis is laid out as follows:

Chapter 2 provides an overview of the research methodology employed which was a scoping review of the literature. It includes a brief reflection on the process that led to this approach being adopted. It explains the typological (as opposed to thematic) analysis that was employed whereby the academic literature was distinguished from, and reviewed in advance of, commercial and grey literature. This tactic facilitated the use of the academic literature as additional criteria with which to analyse the commercial and grey literature. Additionally, the chapter identifies the criteria on which the literature's quality and utility to the planner can be judged. This question of quality is addressed at some length and strict academic and legal criteria are proposed for this purpose. This facilitates an insight as to why the discipline struggles to achieve real professional status and how this issue might be resolved.

The benefit of such an approach is that it avoids repetitious primary research based on qualitative reports that merely iterate the plight of the planner. Rather it concentrates on what must be done to build the essential doctrinal foundation of the discipline. In doing so it embraces complementary work on military doctrine and principles. Whilst not commending 'militarisation' of BCR, it does suggest that the development of doctrine and the underpinning principles are the missing element in BCR's claim to professionalism.

Nevertheless, some elements of planning in the public sector are deliberately excluded from debate because their planners have little choice but to follow legislative demands. Hopefully the thesis might implicitly question the wisdom of the imposition of poor standards on the public sector which can as Ritzer (2008) noted, foster the lowest common denominator of planning. Similarly, the burgeoning software 'solutions' are also excluded from consideration, these limitations are elaborated on in this chapter.

Chapter 3 provides a context for the analysis of the literature. Without such a context the analysis would be remote from the plight of the planner. The definitions of the terms used are clarified and it summarises the historical development of the discipline and its intent. It examines the managerial level of practitioners and offers insight into what consensus exists as to what a 'plan' actually is. The 'authorities' of academic commentary, government advice and representative trade institute doctrine are summarised as to their relevance to this work. The environment in which practice is conducted is considered together with a summary of its current academic teaching. This chapter thus reduces the need for iterative contextualisation in later chapters.

Chapter 4 considers the seminal academic literature which has shaped the discipline of BCR. The focus is on the type of literature likely to be included in a university reading list, the recommended textbooks, and those works which dominate academic thinking. What it reveals is the difficulty of applying academic theory to practice. This is especially so when much of the literature is the development of theory and can only be applied to the plan with difficulty. It also demonstrates that a great deal of academic literature has been reduced to 'soundbite' status in the 'osmotic' movement from academia to practice. Illustrations of this includes phrases such as, 'risk homeostasis', 'isomorphic learning' and even 'risk and uncertainty'.

Chapter 5 first analyses the relatively limited literature specific to planning. This sets a context for the examination of literature which, whilst academic, was not specifically authored for the BCR planning discipline. The scope and sources of the literature are wide and varied. It touches upon several issues which are of a psychological nature. This is because the teams responding to incidents are both individuals and groups and their respective psychologies are germane to planning. Curiously, whilst these articles were not authored for the BCR discipline, they often seem to appeal to a wider

practitioner audience and, sometimes, are better known than some of the key texts discussed in chapter 4.

Chapter 6 examines the highly influential contributions of the BCI, the BSI and ISO standards and HM Government advice for the commercial sector (the public sector having been excluded from the review for the reasons outlined in the methodology chapter). It reveals that the BCI advice is not academically proven, their standard of research is pitiful and tainted by commercial interests. The ISO standards, which at least in the UK, have become synonymous with best practice as opposed to being an auditable standard, are poorly authored, semantically confused and self-referencing. In refreshing contrast, HM Government advice is far more credible and measured and it has been seen to set the agenda for subsequent developments.

Chapter 7 addresses the value of the articles that are either referenced works authored by practitioners, or academic articles specifically tailored for the practitioner. The quality of such material varies. There are some rare well authored gems in a mire of process driven offerings which iterate an unproven procedure. The encouraging critical issue in this chapter is the notion that academic/practitioner collaboration is useful and necessary. It will be argued in chapter 9 that this notion is pivotal to the improvement of BCR literature and the development of an enduring paradigm.

Chapter 8 defines and then considers the degree of professionalism enjoyed by the discipline. This is a major question which determines the potential suitability of the literature. If BCR is merely a 'discipline', then the critique of the literature could be unduly harsh if no professional standard is to be maintained. The chapter examines the concept of professionalism and compares the practice of BCR to established professions and academic definitions. It is argued that, when subject to such criteria the discipline of BCR does not warrant the term 'professional'. Therefore, perhaps the limited literature, both academic and 'good practice', is wholly appropriate for a relatively simple and procedural management discipline; albeit it one remaining capable of improvement.

Chapter 9 concludes the thesis by summarising the key findings, discussing the overall status of the literature and outlining the implications. This study's conclusions will differ markedly from the blandishments of the glossy brochures, the elegant self-help books

and the exhortations of the BCI. This study uncovers the vulnerable underbelly of BCR where bland assumptions and paradoxer's advice influence the planner far more than might be expected and the resultant plans are far from the intended ideal. In terms of findings, it will be contended that fundamentally the process of BCR planning lacks a sustainable paradigm, as defined by Kuhn (1996) and that Boin's (2006) and Lindstedt's (2007) plea for quantitative studies into BCR practice has been met by several authors, often commenting on the criticality and issues of supply chain management but it has not resulted in any significant body of work that quantitatively evaluates and endorses the efficacy of the BCMS process. The implications of this militate for a consideration of additional literature that does not appear to have been considered or applied to the discipline to date and which might offer an opportunity to develop BCR doctrine. The key recommendation is that BCR considers emulating military planning doctrine and the debate highlights areas for future consideration and development. The chapter concludes by pleading for greater collaboration between academia and practice. It recommends a leap to more realist quantitative analysis of accepted wisdom and a move away from self-serving semantic debate and theory building.

Chapter 2 Research methodology

Introduction

This chapter outlines the secondary research methods used in this thesis to deliver a scoping review of the pertinent literature that informs the BCR planner. It is presented in six sections. The first section outlines the academic position of the thesis in terms of epistemology, paradigms and approaches. Secondly, the research design section, offers a rationale for the utilisation of a practitioner conducted, secondary research based, scoping study. The third section, on the research process, clarifies the criteria by which the literature is selected and analysed. The fourth section reflects on the research experience and notes some approaches that were rejected. The final two sections conclude by summarising the ethical position and then discussing the relative merits of the adopted approach.

The research design

As stated earlier, the aim of this research is to consider the quality and utility of the BCR literature to inform ‘professional’ practice. The supporting objectives are: to critically review the various categories of literature, to examine the concept of professionalism in relation to the literature, and to assess the degree to which the literature might be improved. These objectives which support the aim, whilst simple to address in principle, trail with them clouds of uncertainty. Implicitly they beg the question as to whether the available literature has the power to drive a BCR paradigm without which professionalism of BCR is impossible.

As a study of a business activity it was difficult not to have an instinctively positivist, realist or pragmatist perspective. However, interpretivism as defined by (Remenyi, Williams, Money and Swartz 1998,) appealed more as it reflected the notion that, ontologically speaking, individuals and groups (the BCI and several authors) were constantly constructing and reconstructing the ‘reality’ of BCR practice. For example, the BCI (2017a) report *Resilience is your competitive advantage* redefined the entire intent of the Institute. Epistemologically this ‘reality’, which is defined by the literature, needed to be analysed to identify its quality and its utility to the planning process. This

was done by a critical inquiry using a methodology of secondary research. The specific method employed was identified as a scoping study.

A number of possible alternative, empirical research-oriented themes for this professional doctorate research were rejected. One reason was that the myriad of BCR definitions renders many forms of primary research questionable due to non-uniform participant understanding. For example, Norris et al. (2008, p. 129) offer 21 academic definitions of the word 'resilience' in tabular format. Another was that the frequent surveys by the BCI risk 'survey fatigue' in participants. Questions related to the lessons of large scale catastrophes lack resonance with planners in comparatively benign environments. Corporate BCR plans are fundamentally confidential, and the planners are understandably protective of their own reputational and employment positions. Planners' qualifications, ages, positions within organisations and experience vary considerably. The discipline is relatively juvenile; the BCI was established in 1994. Cognitive commonality, which was defined by Larson (1977) as a predeterminate of professionalism, not a consequence of it, has not yet occurred and terminology as noted by Lindstedt (2007), Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum (2008) and Alexander (2013), remains eclectic, yet despite this ISO standards have been authored for corporate use.

All these factors are illustrative of an immature, emerging discipline aspiring to be a profession. This suggested the need for a scoping or systematic review of the pertinent literature utilising a secondary research-based approach to provide a better baseline of understanding before subsequent investigations, of a more specific nature, can be undertaken.

To justify this approach the following features of the study must be considered:

- The benefits and limits of a practitioner-based study;
- The validity of 'stand-alone' secondary research;
- The identification of an appropriate type of scoping or systematic review;
- The establishment of criteria by which the diverse literature can be analysed in terms of its quality and consequent utility to the planner; and
- The identification of the appropriate literature.

The position of the author as a consultant with some 22 years' experience, and a desire to undertake research that would address a pressing informational need within the fast-evolving BCR landscape drove the study. The author's position is important in justifying some of the critiques of the literature. At risk of brief immodesty Chris has run a consultancy in London for 23 years, working with mainly FTSE 500 companies. He has written extensively in the trade press and has presented on four universities' risk management courses. He was awarded the BCI's Global Consultant of the Year Award in 2015. His comments are also informed by being a planner for sovereign wealth funds and clearing houses as well as experience as a strategic level responder in several international corporate crises from 9/11, whilst working for an airline, to recently working on an international corporate cyber blackmail.

Practitioner research is growing in popularity and credibility. Keane, Shaw, and Faulkner (2003), noted the volume of research activity and Shaw (2005, p.1236) similarly registered the increase in practitioner research claiming that the practitioner researchers outnumbered mainstream researchers, at least in the field of social work. Shaw (2002), strongly endorsed practitioner research when it has a "grounding...on the basis of a purpose" (p. 3), a view echoed by McLeod (1999), who commended "research carried out by practitioners for the purpose of advancing their own practice" (p. 8). Shaw (2002, p. 4) summarised two arguments in favour of practitioner research, the professional obligation to be self-evaluating and that research and practice require a similar skill set, a point also noted by McIvor (1995)

The starting point is... the twofold belief that practitioners should be encouraged to engage in the evaluations of their own practice and that they possess many of the skills which are necessary to undertake the evaluative task. (p. 210).

Endorsement of practitioner research does not go without caveat. Shaw (2002) notes that many such researchers have "A too conventional writing 'voice'." (p.4), that "Practitioner research tends to be weak at the very point where it seems most strong - its practical usefulness." (p.2), and that it is often based on "a sadly dilute variety of qualitative methods" and "knee jerk semi structured interviews" (pp. 9-10). However,

it was conceded that most issues can be mitigated by study within a supervised academic environment.

A very pertinent point for practitioner research was proposed by Kirk and Reid (2002), namely distinguishing between science as a source of knowledge and as a model showing how practice should take place. This distinction of the degree to which academic knowledge informs practice is an essential feature of this thesis. Reid (1995) noted the distinct similarities between social work practice and research. Even if the analogy is 'stretched' in its application to BCR, Reid highlighted the need for "the application where possible of evidence-based knowledge, and the discriminating evaluation of the outcomes." (p.2040). This strongly echoes the idealised practice of BCR where the critical question is what research can, or should be, applied to practice, it is pivotal to this work and is little considered. The practical nature of the potential research was also noted by Hall (2001) who commented that. 'all social research, in as much as it is about and results from an engagement with the social world, is 'applied' (p.58)

Hall seemed to strike the right balance when he rejected the binary distinction between academic or applied research, and this neatly summarises the nature of this approach.

Secondary research

Proctor (1993) noted that "secondary analysis of data is fast growing in importance...at its best the quality of data obtained in this way is likely to be higher than a relatively inexperienced researcher can hope to gain..." (pp. 256-257). Since then, secondary research has become increasingly established and popular with its benefits being noted. Robson and McCartan (2016) commented that "a change in this edition is the greater attention given to 'desk based' projects based solely on existing research." (p. xvii). Saunders, Lewis and Thornhill (2009) noted that the reticence to use secondary data as an approach could be due to academic inclinations to conduct primary research.

...few students consider...the possibility of reanalysing data...such secondary data can provide a useful source from which to answer...your research question(s). (p. 356)

Ehrich, Freeman, Richards, Robinson, and Shepperd (2002) advocated its use to “map a wide range of literature and to envisage where gaps and innovative approaches may lie.” (p. 28). Grant and Booth (2009) highlighted its utility in circumstances in which “either the potentially relevant literature is thought to be especially vast and diverse....or there is a suspicion that not enough literature exists” (p. 95). This sentiment echoes the dichotomy between the views of Wong (2009) who noted a ‘myriad of information’ (at least at the tactical and operational levels), and the *Academic Literature an Overview* (2015) which suggested a dearth of literature. This validates the approach to this work and secondary research facilitates an excellent vehicle for the examination of BCR literature.

Types of reviews

In identifying a secondary research process, the ‘Scoping Study’, defined by Levac, Colquhoun and O’Brien (2010) seemed most appropriate. Writing on health research, they elaborated on the six stage methodological framework of Arksey and O’Malley (2005) and made several compelling points which have informed this study. They described scoping studies as:

Requiring analytical reinterpretation of the literature...researchers can use scoping studies to refine subsequent research inquiries.. that may be particularly relevant to disciplines with emerging evidence.... Researchers can incorporate a range of ...published and grey literature (p. 1).

The first five points of their methodological framework referred to above echo the structure of this work, namely; identifying the research question and the relevant studies, studying the selection of literature, ‘charting’ the data and then collating, summarizing and reporting results. Levac et al (2010) also noted the practical need to, “consider the balance between feasibility, breadth and comprehensiveness...When limiting scope”. They went on to say that “researchers should justify their decisions and acknowledge the potential limitations of the study.” (p. 5)

The issue of the methodological quality of the selected literature was also addressed by Levac et al (2010) and they cited Brien, Lorenzetti, Lewis, Kennedy, and Ghali

(2010) and Grant and Booth (2009) who respectively had noted that the omission of a quality assessment made the findings “more challenging to interpret” and limited the uptake of “findings into policy and practice” (p. 8). This scoping study process bears close relationship to the notion of a broad literature review in order to elicit specific materials for more detailed analysis, and the stated need for quality assessment of the content advocates a critical review of the selected literature.

Systematic reviews, as defined by the Campbell Collaboration (2018) ‘The purpose of a systematic review is to sum up the best available research on a specific question. This is done by synthesizing the results of several studies.’ are substantially similar to scoping reviews. Kitchenham (2004) presents an hybrid document that took medical systematic review guidelines and transposed them into a software engineering environment. Not only was the approach deemed suitable as a doctorate study, it precisely defined a systematic review as,

A means of evaluating and interpreting all available research relevant to a particular research question, topic area, or phenomenon of interest...to present a fair evaluation of a research topic by using a trustworthy, rigorous and auditable methodology. (p. iv).

Kitchenham (2004) elaborated on the secondary study elements of systematic review and noted that in terms of the motivation for performing such a study it offered ambitions very akin to the author’s own in this work;

to summarise the existing evidence...to identify any gaps in the current research,to appropriately position new research activity. (p.1).

The process offered by Kitchenham (2004) parallels the scoping process outlined by Arksey and O’Malley (2005). This illustrates the close relationship between scoping, documentary analysis and systematic review.

The essential 'review approach' has also received recent endorsement by Denyer³(2017) as a valid approach specifically in the study of BCR. His academic team at Cranfield referred to their approach, somewhat inelegantly, as a rapid evidence assessment "REA" which. 'evaluate claims about what works and provide an evidence-informed basis for managerial action.... and is a tool for getting on top of the available research evidence within a relatively short timeframe' (p. 26).

However, documentary analysis underpins all scoping studies, systematic reviews and REA derived work. It is consistently academically defined and at its core there is an imperative to gain conclusions by interpreting the literature considered. Bowen (2009, p.27) citing Corbin & Strauss, (2008) defined it thus, "Document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding and develop empirical knowledge". Fitzgerald (2007) uses almost identical words in that it, "requires readers to locate, interpret, analyse and draw conclusions about the evidence presented." (p. 279). The result of the analysis being described by Merriman (1998) as a way to, "uncover meaning, develop understanding and discover insights..." (p.118).

Whilst analysis of BCR literature is ideally suited to an expert practitioner conducting a secondary research analysis, two additional criteria must be addressed. The literature selected must be illustrative of BCR's many facets, and it requires documentary analysis and scoping/systematic review to be a valid approach especially when employed without complementary primary research. Fortunately, Bowen (2009) endorsed the view that it could be used as a "stand-alone method" for "specialised forms of qualitative research" (p. 29).

The research process

Having established the validity of the approach, the critical issue of the analysis criteria is now considered. Kitchenham (2004) noted the need for "a fair evaluation of a research topic by using a trustworthy, rigorous and auditable methodology." (p. iv). As this work is an analysis of the quality, and thus the potential utility, of the literature the identification of a rigorous methodology is essential.

³ Professor David Denyer is the Professor of Leadership and Organisational Change and Commercial and Development Cranfield School of Management

To achieve any validity in the critique of such literature, my critique needs to be based both on the most appropriate standards of 'proof' and the correct academic criteria of analysis to ensure that the findings are not a statement of biased personal opinion. Summarised below is what is perhaps the fairest and most equitable burden of proof and the most appropriate academic criteria that can be applied to the selected literature.

The establishment of the analysis criteria

The establishment of literature analysis criteria begins with Wallace and Wray (2006) cited by Saunders (2009), who offered the simple criteria of 'credibility and evidence',

How convincing is what the author is saying? In particular, is the argument based on a conclusion which is justified by the evidence. (p. 63)

However, as Taleb (2010) emphasised, twice, in his book *Black Swans*, mere repetition does not create such credibility and evidence is not mere iteration.

...successions of anecdotes selected to fit a story do not constitute evidence. (p. xxxii).

...a series of corroborative facts is not necessarily evidence.

(p. 56).

Developing the criterion of credibility, this thesis hinges on Minger's (2000) four critiques of 'rhetoric, tradition, authority and objectivity' (pp. 225-226). Adapted for this work these can be summarised as:

- A critique of the language and clarity of expression.
- The critique of 'conventional wisdom'.
- A questioning of the 'dominant view'.
- The examination of the degree to which the work is 'value free'.

Fitzgerald (2007, p. 285) also stressed the need for some criteria to be applied in the analysis of literature. She suggested that Scott's (1990) criteria of authenticity, credibility, representativeness and meaning should be considered.

Stewart (1984) also listed several questions that a secondary analyst should attempt to answer. Prime amongst them were the following:

- What are the credentials of the data?
- Can the original researchers be assumed to be competent?
- What evidence is available about the the reliability and validity of the data?

This summary of academic analysis criteria uses a quasi-legal lexicon but does not venture to suggest what level of 'evidence' or 'proof' is required in a critique. To determine this one might turn to the law. Damer (2009), a professor of philosophy, quoted Pierce's (1934) lament that every person, "conceives himself to be proficient enough in the art of reasoning already." (p. 2). Ennis (1996 p, xvii.) noted that critical thinking is "a process, the goal of which is to make reasonable decisions about what to believe and what to do". These two comments encapsulate the whole issue underpinning BCR advice and the need for pragmatic critical thinking. As noted by Damer (2009), the burden of proof rests with those setting forth the position. To demand that the practitioner accepts the propositions by shifting the burden by suggesting that the proposition is true, unless it can be proved otherwise, is to commit the fallacy of "arguing from ignorance" (p.7), that is, without evidence.

Only criminal acts in the UK demand proof beyond 'all reasonable doubt', and the criteria of the civil matters seems more appropriate. This is the lesser 'balance of probability' in UK courts or in US terms, a 'preponderance of the evidence'. This reduced burden of proof is still not easy to discharge, it still requires evidence. Evidence is not simply the 'hearsay' of iterative statements or circularities of mutually supporting opinion. Rather, it requires an 'argument' which is defined as an opinion supported by some form of, "rational reflections on the evidence" (Damer, 2009, p.14).

However, the greater the claims, the greater too should be the burden of proof. Perkin (1989) noted, perhaps a little harshly, that the professions,

live by persuasion and propaganda...claiming that their particular service is indispensable to the client...By this means they hope to raise their status and through it their income...With luck and persistence they may turn the human capital they acquire into material wealth. (p. 6)

This begs the question, does the evidence for materials presented for the practitioners of BCR amount to little more than a propagandist syllogistic trap or is it logically sound? Professionalism is clearly, according to Perkin (1989), a potentially valuable notion and any claim should be comprehensively proven. Furthermore, the onus of proof should be on the person or group making the assertion to prove it to an unbiased audience. As Jones and de Villiers (2009) noted, the principle, used by Burke in his *Reflections on the Revolution in France* that, “no man should be judge in his own cause” (p. 209). Thus, the industry, in this case represented by the BCI and the BSI, cannot judge itself. Least of all can it present standards which are referenced only to their own work, to justify opinions and publications. Finally, the industry, if following the legal principle above, must be open to the counter arguments of its critics.

Assuming that the BCR literature is seldom criminal, and that the ‘quality of mercy is never strained’ (*The Merchant of Venice; Act IV, Scene 1*), the ‘merciful test’ as to the quality of advice remains the test of ‘reasonableness’ epitomised by Lord Denning’s legally apocryphal ‘man on the Clapham omnibus’. This was updated by Lord Steyn’s analogy of the “commuter on the underground” (*Macfarlane and Another v. Tayside Health Board (Scotland) [1999]*). The principle in this test is that, what is deemed ‘reasonable’ in a legal context in a civil case, would be that which the normal person on public transport felt was reasonable. So, for the purposes of this review the onus of proof lies with those making the assertion of professionalism, competence or literacy and the level of proof required is simply that of reasonableness.

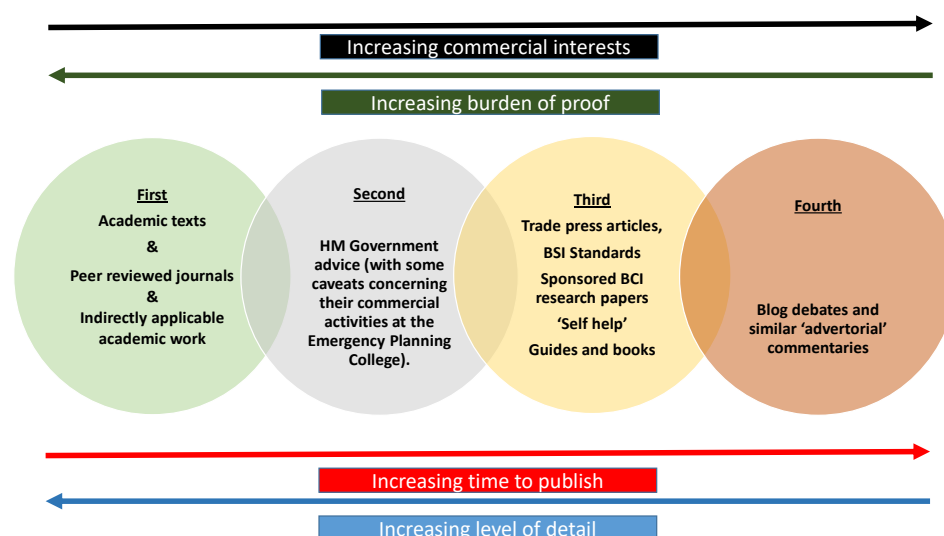
The selection of the literature

If the overall test of the literature’s suitability to the discipline is one of reasonableness then it begs the question, what literature is reasonable to include? The question as to just what literature influences or should influence the planner is not easy to answer. The seductive temptation to validate the selection of influential literature by utilising citation records was questioned by Taleb (2010, p. 217). He made a spirited denunciation of this means of discrimination which he called the ‘Matthew Effect’. This is a condition where the quoted become increasingly more quoted and for little more reason than the numbers quoting them, more quoted, (the reverse for the initially less quoted also applies). Less stridently, Saunders et al (2009) noted that, “Unlike some academic disciplines, business and management research makes use of a wide range

of literature” (p. 61). This truism nevertheless presents some problems in discerning the useful, the persuasive, the well-known and valid literature amongst the resultant morass of published work. Saunders⁴ et al. (2009, p. 258) elaboration on what constitutes valid, raw, and/or compiled secondary material is very broad indeed. Their definition stretches from journal and magazine articles to minutes of meetings, shareholder reports and even video recordings. Nonetheless, this liberal definition will be applied, albeit judiciously, in this work.

Saunders et al (2009) noted that “Often as information flows from primary to secondary to tertiary sources it becomes less detailed and authoritative but more easily accessible.” (p. 68). Their model, (fig 3.2 p. 69), of primary, secondary and tertiary sources is adapted slightly in this case due to the nature of publications in this field and, suitably augmented by the author, it justifies the diverse sources considered in this work. It is presented below.

Figure 1 Literature Sources



⁴ Mark Saunders is Professor of Business Research Methods and Director of PhD programmes at the Birmingham Business School, University of Birmingham. Prior to this he was Professor of Business Research Methods at the University of Surrey where he was also Director of Doctoral Programmes for the Faculty of Business, Economics and Law.

Based on Figure 1 above, this admits a raft of literature that is germane to BCR but which was authored for other audiences. Notable in the literature are several theories concerning decision making. It is not within the scope nor is it the ambition of this work to subject this literature to detailed examination from a psychological or decision-making paradigm perspective. As Luce and Raiffa (1990) proclaimed nearly 30 years ago,

Decision making is a vast area! The bulk of theory in economics, psychology and management sciences can be classed under this heading. (p. 21)

But they also defined a particular problem in decision making that is germane in the determination of the quality of much of the work on resilience and threats.

Very often the heart of the problem is the appropriate choice of the associated index. In many economic contexts profit and loss are suitable indices, but in other contexts no such quantities are readily available. (p. 21)

This argument can be seen to be applicable to many of the surveys, white papers and thought leadership papers published in BCR literature in which the indices themselves remain stubbornly subjective, for example the BCI (2017, b.) *Horizon Scan* where degrees of 'concern' was the index term used in the questionnaire, it was subsequently changed to the word 'threat' in the publication. Therefore, the choice of a potentially quantifiable objective index in any article, such as 'concern', will be used as a benchmark critique of any survey or set of opinions.

Tversky and Kahneman (1974) highlighted 'cognitive biases' that derived from 'judgemental heuristics', essentially mental shortcuts, used when taking decisions under uncertainty which can lead to severe errors of judgement in both lay people and experts alike. Therefore, any work seen to influence the planner should be subject to the following additional criteria:

- Does the study or report have an appropriate 'index' term which is as objective as it can be, and is it maintained in the article?

- Is it likely that heuristics (including imaginability) might have led to errors in decisions or judgements in the interpretations of surveys, white papers and the like?

If a piece of work is vulnerable to criticisms based on these criteria one might be inclined to 'feel its quality' and hence its influence on planning should be questioned.

In relation to the academic works selected, they are believed to be those that are potentially most likely to have influenced a planner. Their selection is based on their perceived influence, such influence is derived from several factors:

- The work being taught in universities.
- The author's opinion as an 'expert practitioner'.
- Direct attribution of the work or theory in planning advice elsewhere.
- The sonar trace of the original academic work being identifiable in grey literature.

The author has applied some discrimination whereby for example the work of Perrow (1999) is included, but an article by Eyre, Crego, and Alison (2008) which deals with *Electronic Debriefs And Simulations In Defining The Critical Incident Landscape* is deemed too bespoke for inclusion on the basis that it will have influenced fewer planners.

The focus of the work

There has been a great deal of literature authored by and/or for the public sector. Often it has applicability equally to the public and private sectors and there are several references to such publications in the thesis. However, for the following reasons, the study does not focus on the responses of public sector organisations. The public sector, in the case of 'category 1 and 2 responders,' is legislated for under the Civil Contingencies Act 2004. They are obliged to make contingency plans aligned to BS 25999, now ISO 22301 (2012). The public sector also enjoys their own training centre; the Emergency Planning College. This is now operated by Serco and, although its courses are open to the public, its focus remains on the public sector. Additionally, the public sector is 'underwritten' by the government and is 'self-insuring'.

In contrast, the private sector, with some exceptions such as utilities, is not constrained by legislation and only operates within some regulatory boundaries, which are often loosely adhered to. The private sector is largely insured by third parties and is profit dependent for its existence. In other words, the private sector's motivation to make a plan is more likely to be based on a genuine desire than government compulsion. Additionally, public-sector organisations often retain contingency planning managers with a sole role; in contrast, private sector resilience planners are a mix of resilience managers and staff for whom resilience planning is an additional role. Their background disciplines vary from security, to facilities management, IT, and even microbiology. This diversity of training might prove to be an interesting factor in influencing their approach to resilience, but it remains that they are more likely to turn to the literature for help in the formulation of a plan.

The relatively recent development of planning software 'solutions' are also excluded from consideration for three reasons. In the author's experience, they are simply access database developments which only provides a convenient input or template format. Their utility could be also achieved with the astute use of normal office systems. In the main they claim to conform to ISO 22301 and BCI best practice. In summary therefore, they do not add to the literature, the process of planning, or evidence new thought; they merely reflect existing practice and are normally costly and unwieldy to implement. It is therefore appropriate to exclude them from this analysis.

Whilst the study references overseas materials and many UK planners work internationally and international standards are axiomatically 'global' in nature, the main focus is on the plight of the UK planner. Therefore, final limitation is that, for two reasons, the work relates to BCR practice in the UK. First, the author does not feel that the epithet of expert practitioner is sustainable beyond the UK as some significant differences in approach and processes exist overseas. Second, were these differences to be considered the review would at least double in size.

Ethical issues

The ethical issues associated with this secondary research were considered and addressed by satisfactory completion of the University's Ethics self-assessment form. An appropriate ethical exemption certificate was granted. This certificate is attached at Annex A.

The research experience

During the research changing personal circumstances seriously affected my studies and the process has had a significant emotional effect on the author. It is tempting to maintain the illusion that secondary research was my first choice of approach; albeit easier to defend in examination, this would be disingenuous. In retrospect, however the secondary research of an expert practitioner is preferable, given the juvenile nature of the BCR discipline, to any form of primary research. But this realisation came from a process of considering several other approaches which, whilst non-productive, was not wasted time and effort and great deal of 'learning' occurred in the process.

My original research inclination was to positivism and as Remenyi et al., (1998) suggested, to make "generalisations similar to... natural scientists". (p. 32). At the same time, again as observed by Remenyi et al (1998), it is often required to appreciate the "details of the situation...or perhaps a reality working behind them." (p. 35), which could be best achieved by interpretivism. At the risk of simplification, this led to a choice of deductive or inductive research approach. Was it possible to construct a research strategy to test a hypothesis on BCR or was it advisable to collect data and develop theory as a result of subsequent analysis?

Given the paucity of research into validating business continuity practice, the collection of quantitative data (a deductive emphasis) seemed important, as did the need to understand the meaning that the practitioners attached to the issues (an inductive emphasis). In terms, then, of research strategies almost any strategy ranging from case study, to ethnography, to survey, to action research offered some potential to shed light on the topic in question. With no approach or strategy having any clear advantage, a multi-method or mixed method seemed to combine the best aspects of

the various approaches. As Saunders et al (2003) noted it can be beneficial to mix and match methods to tackle specific purposes in the study and as they suggested, “Business and management research is often a mixture between positivist and interpretivist, perhaps reflecting the stance of realism” (p. 85). Thus, this beneficial compromise of a realist approach suggested the optimal solution of a mixed methods approach to gain both quantitative data and appreciate it in a qualitative fashion.

Consequently, a quantitative survey augmented by qualitative interviewing, seemed a logical approach. If Lofland (1971) was correct in the assertion that interviews could, “elicit rich detailed materials...to find out what kind of things are happening” (p. 76), then it would appear to deliver several benefits with fewer ethical, practical, time and cost issues. However, the author was, and is, a practitioner/consultant in the discipline of business continuity (BC) and the participants were his peers and in many cases clients.

Fortuitously, the Advanced Research Techniques (ART) taught module offered an opportunity to trial this process and a draft questionnaire in line with Mitchell’s (1996) advice was piloted for critique by an expert panel. The resulting responses to the questionnaire were influential in altering this proposal for the following reasons:

- The sample would have been skewed towards BCI members.
- Largely due to the variety of understandings of terms in a specific work environment, ‘resilience’ and associated questions were very differently interpreted by entities as diverse as the Supreme Court and Rio Tinto Mining. Consequently, the feedback revealed that the questions were differently interpreted, or misunderstood, by the expert panel.
- To simplify the questions to the point where they were similarly understood would make the questions so anodyne as to lose the insight that was sought.

At this point it would normally have been appropriate to investigate why the survey was differently understood and to take appropriate remedial action. In brief certain flaws in the study were apparent and these are noted below so that if further research should be undertaken in a similar vein it will avoid these pitfalls.

- de Vaus (2005) offered the cautionary note, that ‘too often researchers design questionnaires or begin interviewing far too early – before thinking through what

information they require to answer their research questions'. p,9. I believe that in this instance the questionnaire was too rushed, albeit it was a pilot study.

- Similarly, de Vaus's comments on the 'subjective, meaningful and voluntaristic components of human behaviour' p,5 had not been adequately accommodated in the question design.
- Finally de Vaus's caution that '*Ideally the groups we are comparing should be the same in all relevant respects except in regard to the independent variable.*' p,43. de Vaus used the analogy of schools which would be required to contain 'comparable students', in my pilot study it was clear that the participants were perhaps not comparable.

However, this original idea was superseded by a proposed programme of qualitative research using semi-structured, non-standardised interviews utilising some members of the original expert panel, my clients, as the interviewees. Notwithstanding all the background work alluded to above, the ethical issues of my relationship my clients remained resolutely problematic and the effort and time that would have been taken to compensate for these factors was disproportionately high.

Therefore, I adopted to the secondary research alluded to above. The research experience was bruising but informative and it illustrated to me that the range of methods of inquiry is vast. Interestingly, I have found that the rather remote secondary research scoping review made me think far more about the literature than I should have done in a more modest literature review preceding some form of primary research.

Conclusion

Because the discipline still displays an immaturity that is largely unchanged since Toft and Reynolds (1997) commented on it, as did Lindstedt (2007) a decade later, and because the literature still offers a bewildering array of advice, the selection of an appropriate methodology was critical. Feyerabend's (1975) appeal for anarchic research was sadly dismissed.

The interpretivist paradigm combined with the secondary research-based scoping study which was adopted, proved an ideal vehicle by which to analyse BCR literature. This validated the idea of Saunders et al. (2003, p. 99). They contend that such

research retains a positivist and interpretivist stance that results in realism, or in this case interpretivism. The selection of the criteria for the admission of various types of literature as well as the criteria for the analysis of the literature proved a precise tool in the generation of constructive literary criticism. In large measure this hinged on Minger's (2000) criteria for literature analysis, which greatly facilitated the commentary.

The legal concept of 'reasonableness', established in the civil case of *MacFarlane and Another* (1999) and the consideration of the degree of professionalism exhibited by the discipline were an essential adjunct which attenuated the criticism of the literature that had been generated by the review. Finally, the simple caveat of Taleb (2010) concerning iteration not being evidence, proved essential time and again in the critique of the ISO standards and best practice where referencing is stubbornly circular.

An inherent difficulty in the case of a scoping study is that thematic analysis is elusive and potentially iterative. It is elusive because much of the literature deals with the same themes and their selection of the same topics and themes is not the question. The question remains resolutely the utility of the literature to the planning process. Therefore, the literature itself is grouped in categories ranging from the purely academic to the self help book. This tactic avoids the necessity of iterative and lengthy comment on themes and as it is oriented to the criteria of the quality of the literature selected, it also avoids the propensity to become an annotated bibliography or an extended literature review. The critical differences are mentioned by Bowen (2009) and Fitzgerald (2007) earlier in this chapter in that the comprehensive or scoping review gains insight into what further developments might be required in a particular field. Whilst the Literature Review of Business Continuity/ Resilience etc comprise the main part of the thesis, the thesis itself is not only such a review, but it also deals extensively with how the literature can be applied to enhance resilience and how the findings of the literature so far have been applied, or not applied or mis-applied in the planning process of business continuity/ resilience.

Thus, the study revealed several defects in most of the BCR literature and thereby aspects of the planner's plight became clarified; this revelation strongly commended

the consideration of alternative disciplines' doctrines and policies to be considered as a vehicle for BCR literature's development of a valid paradigm.

Chapter 3 Understanding BCR

Introduction

The intent of this chapter is to offer an essential context or backdrop for the subsequent analysis of the BCR literature, examining the drivers and scope of the discipline. In doing so it utilises works by Kay (2011), Wong (2009) and Lindstedt (2007) as well as the research by Elliott and Johnson (2010). It then offers a historical context of the development of BCR which leads logically to a consideration of the semantic debates. The influences on the planner of HM Government advice, the BCI best practice and BS and ISO standards is then considered. Penultimately, the nature of plans and the position of the planner is debated. Finally, the BCR body of knowledge and the degree of academic interest in BCR is discussed.

An historical context

In two decades business continuity has evolved from being a primarily IT recovery function to having a broader remit of risk, people, reputation, cyber-crime and physical assets. This evolution is illustrated by the following quotations dating from around the year 2000 when the millennium bug catalysed widespread business interest and public awareness. Van Happeren (1999) advocated a broad risk management slant, stating: “a company should direct its efforts more widely...it should apply an all-encompassing Business Process Risk Management approach.” (p.19). McIlwraith (1999) focused on critical functions, not merely the IT processes, and Springett’s (1996) definition was prescient on the threat of what was to become cyber-crime:

...business contingency, a holistic approach to the survival of an organisation rather than just its IT element...Even the threat to staff...comes under the business contingency umbrella...as well as the menace posed by hackers and computer viruses. (p. 22)

Kalmis (2000) noted that: “Managers...have extended the planning process beyond the data centre to include most business processes.” (p. 10). Whittingham (2000) echoes this perspective: “Clearly the way ahead is to...adopt a broader approach to managing wider business risk.” (p.16). Other commentators emphasised the consequent need for the training and exercising of staff. Bush (2000) noted that the

'comprehensive' nature of business continuity planning can be achieved through staff training. He advocated, "people centred business continuity training ranging from staff awareness to...realistic disaster simulations" (p. 18). This view was echoed by Jamieson (2000, p. 20) who identified, people, data, infrastructure facilities and plans as the five crucial aspects of recovery from a major incident. He rated the 'people' composing the crisis management team as being the most critical component of the five. Without their training and rehearsal, he argued, the plan was less likely to succeed. Between them, these authors, many of them practitioners, paved the way for the development of the discipline and initiated a far broader perspective of BCR than merely IT recovery.

Elliott, Swartz and Herbane (2002) helpfully conceptualised 'eras' of the development of business continuity progressing from technological demands to an audit process, a value proposition and finally 'normalisation'. More recently the term 'resilience', which was considered at length by Alexander (2013) and Norris et al. (2008), has served to heal the semantic schisms between business continuity, emergency response, crisis management and disaster recovery. This idea of eras is echoed in the development of increasingly reliable IT systems where unstable mainframes made way for the modern servers and the eventual 'cloud'. However, whilst developments in information technology have been dramatic, the methodology and terminology employed in BCR planning has not changed significantly in two decades.

The semantic debates

The general noun 'resilience' is akin to using the word 'medicine' to describe its various subdisciplines: pharmacology, physiology, and anatomy, etc. Resilience, as defined by McAslan (2010), Norris et al. (2008) and Alexander (2013), encompasses the processes of disaster recovery, crisis management, crisis communications and business continuity. Hitherto, terminology was sectarian with several artificial distinctions being made. Almost two decades ago, Borodzicz (1999) recognised the multiplicity of terms used:

... this phenomenon has become known as business continuity or contingency management, and sometimes as corporate risk or security management. (p.11)

Borodzicz added that business continuity is a response to an event that threatens the ability of the organisation to perform its intended function. This tenet is echoed by Burtles & Yates (1998) whose rather similar definitions included:

Contingency plan

A plan of action to be followed in the event of a disaster or emergency occurring which threatens to disrupt or destroy the continuity of normal business activities... (p. 10)

Business continuity plan

...procedures and information which is developed compiled and maintained in readiness for use in the event of an emergency or disaster. (p. 10)

Hiles and Barnes (1999) went into some more detail and defined business continuity more broadly as seeking to concentrate on the preservation of an organisation in the face of a wide threat array:

...its reputation and image; its customer base and market share; its profitability...product recall, hostage, extortion, kidnap, attack on branches. (p. xiii)

They also commented on the evolution of continuity planning and offered a definition of what business continuity had become:

...the development of strategies, plans and actions which provide protection or alternative modes of operation for those activities or business processes which, if they were to be interrupted, might otherwise bring about a seriously damaging or potentially fatal loss to the enterprise. (p. xvii)

Sadly, terminological debate remains abundant to the point of absurdity. Definitions are often irritatingly obvious, for example, "Crisis management provides a business firm with a systematic, orderly response to crisis situations." (Darling, 1994, p. 4), or "Plans are really flexible guides to action outcomes" (Heath, 1998, p. 253). Other

definitions verge on the pretentious or the banal: “crisis management is the shorthand phrase for management practices concerning non-routine phenomena and developments,” (Rosenthal, Boin, & Comfort, 2001, p. 15), or “planners need to work on the basis that a crisis situation is a situation in which there is a threat to resources and people that has little time to be resolved.” (Heath, 1998, p. 261). The best illustration of the semantic mire is quoted below; four terms (underscored by the author) are used in the same paragraph:

As the recovery of local businesses is instrumental to societal resilience, they should be encouraged to develop a business continuity plan. Such a plan helps organisations think about setting up an emergency operations centre...

(Boin & McConnell, 2007, p. 55)

Rather more maturely, Fragouli, Loannidis & Adiave Gaisie (2013) proposed that “despite the origins and evolution of crisis, a unique definition for crisis, its management or planning cannot be easily identified” (p. 363). In terms of documentary definitions, *Crisis Management – Guidance and Good Practice* (BSI 11200, 2014, p. 3) is slightly more pragmatic in its description of crisis management being “the developed capability of an organisation to prepare for, anticipate, respond to and recover from crises” (p. 3).

Perhaps the semantic debate is explicable, if unwelcome, as often the terminology in question reflects the background discipline of the commentator. As the author has previously noted in a good practice guide for the Law Society, business continuity planners refer to ‘business continuity plans’; the emergency services talk of ‘major incident or emergency response’; IT staff consider the topic as ‘disaster recovery’, and PR or media-oriented staff favour the term ‘crisis management’. (Needham-Bennett, 2011).

The semantic debate often masks progress, but the term ‘resilience’ has bulldozed its way to pre-eminence and is now widely accepted, (McAslan, 2010). The origin of the word was related to materials science in the 19th century and now features largely in literature related to psychology. Despite its evident parallels with the intended

outcomes during an incident, the phrase is not without critics, and as early as 2005 it was argued by Kaplan (2005) that the word had questionable utility. which made its widespread application ambiguous and unhelpful. Nevertheless, the balance of opinion is in favour of the increasing use of 'resilience' (McAslan, 2010 ;Sims, 2010). Although its exact meaning is contextually derived, the term has elements that are commonly understood by any organisation. Without re-entering a semantic debate on the nature of resilience and conceding that McAslan (2010) has been disputed by a number of ecologists, such as Klein, Nicholls, and Thomalla (2004), resilience has become increasingly important since the financial crash of 2008-9. The Financial Conduct Authority has rebranded its external risk management division as a 'resilience department' and now conducts 'resilience benchmarking' in the financial sector. The promotion of resilience is reflected by a growing use of resilience as an overarching concept in the development of international standards (ISOs), which have sought to set auditable standards for resilience. These include *ISO 28002: 2011 – Development of resilience in the supply chain*, and currently in the developmental stage, *ISO 22323, Organisational Resilience Management Systems*. Once, if, the latter document is published it will provide organisational resilience with a common reference standard. Echoing this shift from business continuity to the broader term resilience many publications now refer exclusively to resilience, a notable example being *Roads to Resilience, Building Dynamic Approaches to Risk to Achieve Future Success*, a report by Cranfield School of Management on behalf of Airmic (2014).

In summary, 'resilience' is a frequently heard term in many sectors, including psychology, due to its positive connotations of 'recovery'. Whilst its definition remains contextually variable, the ability to bounce back or recover is a common thread. Indeed, Rutter's (1985) simple definition of resilience based on 'bounce back' holds well for its use in nearly any context. But the popularity of a term brings its own perils; the English cricket team middle order batsmen in 2016 were described as 'resilient' and its growing use, risks resilience losing specific meaning and gaining even more definitions. This is a note of caution that was acknowledged in Alexander's (2013) definitive and comprehensive etymological analysis of the word, where three additional opinions of Comfort et al. (2001), Park (2011) and Reghezza-Zitt et al. (2012), were cited in agreement with the sentiment that,

resilience is being used as little more than a fashionable buzz-word...there is bound to be a sense of disillusionment if the term is pushed to represent more than it can deliver. The problem lies in attempts to make resilience a full-scale paradigm or even a science. (p. 2713)

Despite Alexander's caution, the term resilience, when combined with business continuity to become BCR is probably the most appropriate term to use in this thesis.

Contextual academic studies

Scholarly work dealing specifically with the abilities of the BCR planner is not abundant. However, Wong⁵ (2009) debated two key issues; the 'role of BCM in strategic management and the strategic skills of business continuity managers.' p ,62. In tackling this issue he too noted that these required skills have 'not been well discussed'. Then in arguing the case for the inclusion of BCM in strategic management he listed six management skills required of the BC planner, these were; management, analysis, leadership, communication, coordination and innovation. Indeed, they are skills that many managers should display but, in his conclusion, Wong implied that unless these skills were manifested and evident then the role of the BC planner would 'remain operational', p, 67. Interestingly however Wong avoids any commentary as to whether or not the current planners have these skills, it is more by implication that they do not as if they had already manifested them there would be little point to the article.

Lindstedt⁶ (2007), whilst arguing for a narrowing of terms, (as opposed to Wong wishing to broaden the remit of the BCR planner), noted in his introduction that business continuity planning was 'not well defined by its practitioners and not well understood by its customers'. p, 197. He echoes Boin's plea for more quantitative research to prove the value of the discipline, noting that 'This is the (mostly unstated)

⁵ Wei Ning Zechariah Wong PhD MBCI CBCP is a principal consultant at Atkins providing business continuity management solutions to organisations across a range of sectors. He is one of the leading experts at the British Standards Institution (BSI), where he contributed to the development of the world's first business continuity standard BS 25999. He has written for several journals in the area including *Continuity Journal* and *Disaster Recovery Journal*.

⁶ Dr. Lindstedt is a speaker, author, and champion for business continuity. Along with Mark Armour he founded AdaptiveBCP.org and authored the Adaptive Business Continuity book. He is the founder of Adaptive BC Solutions (AdaptiveBCS.com). He consults, teaches, and advises on project management and business continuity

assumption that there is rightly a BCP discipline to be learned and that a methodology that can be discovered and improved.' Lindstedt continues his argument later in the article, p, 203 when he concludes that,

The heart of the problem is that there is no well researched evidence that business continuity planning is beneficial. While many believe BCP provides organisations with the ability to survive disasters, this belief is largely based on intuition and anecdotal evidence.

Once again Lindstedt is not critical of the abilities of the planners but his conclusion points to a lack of common definitions in the industry and to a step change that will be hard to achieve, 'Business continuity planning should continue to mature, if it can do so.' p, 204

In summary Wong and Lindstedt highlight a current lack of strategic ability, a dearth of academic endorsement of practices and an immaturity which generates a need to develop basic managerial skills. However, the works of Wong and Lindstedt are the opinions of academically qualified practitioners and neither directly reflected the plight of the practitioners; to find such data one has to look to other works.

Notwithstanding the merits of Wong and Lindstedt as 'points of reference', their works are at the general level and none of them describes 'first hand' the plight of the planner. The context and issues affecting the BCR planner is well documented in the study of Elliott and Johnson (2010) *The Liverpool Report*. This research is perhaps the most informative study conducted to date. The work was undertaken by the University of Liverpool and was sponsored by some of the then leading BCR consultancies, HM Government and others. Its focus, on the 'voice' of the practitioner, makes it an essential comparative to this work. Its thorough, semi-structured interviews of 83 BCI members, thematically reported upon, is one of the best 'summary reports' available. The report offers another benefit in this thesis, namely that of triangulation, Saunders et al. (2009, p. 258) and Flick (2006). Thus, the report is also used as a frequent basis of critique or point of triangulation in the case of the grey literature which is analysed later.

It is conceded that first impressions of the 'Liverpool Report', Elliot and Johnson (2010) might not commend its scholarly nature. It is not peer reviewed, it was little published in any format other than privately to a few sponsors, it has almost no known citations and was funded by commercial and government sponsorship; as such it is open to justifiable criticism. At first instance it does not appear to have the credentials to be the basis of a critique of an industry and its practices on which so many reflections and comparisons are made in this thesis.

However, with increasing familiarity with the work, commendable scholarly features become more apparent. The work is appropriately and fully referenced. The report was authored in an academic environment and it utilised a sound and well detailed methodology. It is a large study with 83 semi structured interviews of planners and it does not suffer from the 'protectionism' or corporate bias that BCI/BSI sponsored studies exhibit even though it was sponsored by government and commercial bodies. (Unlike the publications of the BCI together with the BSI whose publications are sometimes tainted with marketing a specific product, the work of the Liverpool report was not influenced in any way by the sponsors and maintained academic independence from their ambitions or aims). Finally, it was written by one of the foremost authors in this field whose academic credentials are well established; notably, Professor Dominic Elliott has not only held several similar managerial positions prior to his current role as the Dean of the University of the West of Scotland's School of Media, Culture and Society, he has also published and published 38 'research items' https://www.researchgate.net/profile/Dominic_Elliott.

Notwithstanding, Professor Elliott's prominence, further endorsement of non-peer reviewed materials being utilised in this fashion is required before the use of the Liverpool Report can be accepted. The endorsement for use of non-peer reviewed articles in secondary research can be found in a number of sources but perhaps the most compelling is (Anderson Blenkinsop and Armstrong 2004). The inclusion of non-peer reviewed articles of credible scholarly merit was fundamental to the systematic review of their chosen literature. Anderson, writing as a Professor and Director of the School of Pharmacy at the University of Nottingham, together with her colleagues, included 13 non-peer reviewed reports with 7 peer reviewed papers in their systematic review of an area of pharmacological literature. This preponderance, even

dependence, on non-peer reviewed material in their systematic review of the literature seems to lend some validity to my selection of just one non-peer reviewed article amongst so many other peer reviewed articles that were used, to provide some insight into the plight of the planner. Indeed, it is perhaps ironic that the BCR planner similarly tends to rely on non-peer reviewed materials as well.

The remaining and awkward question of the potentially valid alternatives to peer reviewed articles was tackled head on and in some detail by Arms (2002) (writing in the Journal of Electronic Publishing as Professor Emeritus of Computing & Information Science Cornell University). Arms' essential argument, albeit in defence of non-peer reviewed web articles, is based on the proposition that not all peer reviewed articles vouchsafe quality and not all non-peer reviewed publications lack scholarly/academic credibility. He observes that, 'Most of the high-quality materials on the Web are not peer-reviewed and much of the peer-reviewed literature is of dubious quality.'

Arms continues the advocacy for the recognition of the scholarly qualities of non-peer reviewed materials using an argument based on precedence noting that,

There are a few exceptions to this emphasis on peer-reviewed journal articles. The humanities have always respected the publication of scholarly monographs, and conference papers are important in some fields.

This proposition is followed by the argument that the author's reputation should also to be taken into account.

a researcher can build a reputation in the online world, outside the conventional system of peer review. Meanwhile we have a situation in which a large and growing proportion of the primary and working materials are outside the peer-review system, and a high proportion of the peer-reviewed literature is written to enhance resumes, not to convey scientific and scholarly information. Readers know that good quality information can be found in unconventional places.

Ideally however, I should have wished to rely on a wider and more diverse range of peer reviewed commentaries on the status, role and abilities of BCR planners. Sadly,

the vast majority of such commentaries are published by the BCI who are not unnaturally protective over the sensitivities of their members and hesitate to introduce any critique, academic or otherwise, of their own Good Practice Guidelines and the ISO standards. Similarly, associated journals such as the *Journal of Business Continuity & Emergency Planning* is edited by Lyndon Bird the former BCI technical director and it is reviewed by an 'editorial board' whom they cite in their preface as reviewing 'every article to ensure it is practical, authoritative and relevant' and who perhaps understandably maintain a modicum of protectionism.

Therefore, based on the arguments of Professor Arms, Professor Anderson et al., regarding the inclusion of non-peer reviewed literature, it is respectfully proposed that the University of Liverpool Report 2010, Elliott and Johnson (2010) has sufficient provenance to vouchsafe its credibility as a scholarly 'key source'. Despite that it was not peer reviewed, (it was never intended to be published beyond a discrete audience and personal accident precluded its further development) this does not diminish its credibility as being a foundation on which scholarly arguments and analysis can be based. Incidentally, a personal communication was received from Professor Elliott on 20th March 2019 who comments thus in respect of the Liverpool Report's use in this thesis:

I can confirm that the work was undertaken with academic rigour. A project funded by Government, public and private sector organisations. It was supervised by me. I was, at that time Paul Roy Professor of Strategy at the University of Liverpool, a post I held 2002-2018. I was Dean of the Management School and, more recently, School of the Arts at University of Liverpool. More publications would have been produced, but I had a serious accident in 2012, which slowed this down.

Surprisingly, at first reading, this report offers some faintly contradictory conclusions which are generated by the detailed and specific comment, elaborated upon below. It is perhaps the tension between the ambition of resilience as a paradigm and its actual attainments that generates this subtle dissonance. An explanation might be that the authors used 'resilience' as a contextual lynchpin of the report. If resilience is ill defined

as suggested by Alexander (2013) then this might have generated the dissonance. Some examples from Elliott and Johnson (2010) follow.

The report suggests organisations are “demonstrating a serious commitment to BCM” (p. 2). However, this progress is offset by the conclusion of the report that “normalisation of BCM has not been fulfilled...business continuity has neither penetrated...the majority of organisations nor has it been accepted as a core business function” (p. 22).

In potential contrast to the apparent uniformity of approaches to BCR, which is implied by the BCI and the adoption of ISOs, the authors note that “Business Continuity is defined differently between, and in some cases within, organisations...We do not consider this a problem.” (p. 3); but that “Creating definitions is a key step in institutionalising and establishing a profession’s identity” (p. 4). This endorses Larson’s (1977) precondition of professionalism, namely a cognitive commonality.

They continue, “The importance of strategy to BCM is reflected in references to “holistic and value adding activities, resilience and stakeholders” (p. 6). However, the report cautions: “few of our respondents reported a strategic approach nor did many appear to possess the necessary tools or mind-set to develop such an approach”. It is, therefore, an important question, if in the last seven years, during which time so many standards have been published, this would offer them the requisite tools and mindset.

Page 7 elaborates on the change from “Planning to Management”, which perhaps reflects the growing influence at the time of BS 25999 and subsequently of ISO 22301 (2012) on BCMS. Notwithstanding this, the report suggested that the main preoccupation of organisations remained with the plan as being an “end in itself”.

On Page 9 the basic notions of resilience are summarised very neatly with reference to the origins of resilience as a physical materials science and/or biological phenomena. It is best summarised, as noted in the report, by Walker, Holling, Carpenter and Kinzig (2004), who kept the definition closer to the earlier definitions on the recovery of deformation from impact. Nevertheless, the elaboration on definitions

at appendix 2 (p. 94) amply demonstrates the lack of cognitive commonality which infests the definitions in BS 65000 (2014).

The concluding remarks on the academic context of the study make an unusual claim that there exists “rich academic literature relevant to BCM” (p. 21). But interestingly, the report also concludes that little reference was made to guides to BCM, which it claims are well developed in contrast to “strategy, competitive advantage, resilience and social capital.”

In terms of motivational factors, the report notes the prevalence of “external drivers” (pp. 23-29). These include audit commentary, regulation, corporate governance demands, client and procurement pressures, and insurance brokers. But all of these factors fail to embed the process to the same extent that an internal desire to maintain BCM might. Indeed, almost all the external drivers mentioned might be seen to privilege the application of ‘standards’ that makes their auditing role easier.

The report debates the relative merits and the application of such standards. The authors describe the standard’s effect using the inelegant term ‘MacDonaldisation’ cited by Ritzer (2008). In summary, the report states that standards have been very influential and important in the diffusion of BC practice. However, this has, in turn led to a desire simply to be seen to be doing the “right thing”, “a safe option”. This gives rise to the fear that the rigid adherence to standards might be “detrimental to the development of organisational resilience”, and that the “audit trail or accreditation for BS 25999 provides evidence of effort but not necessarily effectiveness” (pp. 30-31). The most damning indictment was outlined on (p.39). “There was largely an unquestioning attitude towards BS 25999. Adherence to it... was reported as desirable because of the legitimacy it would be seen to confer...” These ideas were then commented on in more detail in the ‘final comments’ (pp. 80-83) with the standard being referred to as a “double edged sword” which could lead to a “game of securing certification, ...protecting their back...and a stifling of creativity...with a comfort blanket of standards”.

To summarise such an excellent report is a disservice. The precis that follows is offered to provide an aide memoire as an analytical tool in the later examination of the remaining literature.

1. There is more business continuity being done than before, but it is not really a strategic concern of the board, or more simply, more people are doing it badly.
2. The plan is still the focus of effort and an 'end in itself'.
3. Standards are good for cognitive commonality but bad for initiative.
4. Motivation is externalised and transitory in effect.
5. BCR is mired in semantic conflation.

One might conclude that the resilience arena is non-strategic, ill-defined and a non-core business activity whose academic validity is hardly mentioned by the report's respondents. This strongly suggests that the position of BCR is 'confused' in so far as such comments could not be levelled at other professions with a recognised authoritative body of academic literature and a common vocabulary. It also demands a closer inspection of the specific academic literature related to resilience.

HM Government directives, BCI advice and regulatory influences

Concurrent with academic and practitioner driven development of BCR practice, HM Government echoed similar sentiments which were outlined by the Home Office Communication Directorate (1996) in their publication, *How resilient is your business to disaster?* This was prepared by the Home Office, now Cabinet Office, Emergency Planning College and it carefully avoids 'labelling' their advice at all, although the foreword refers to 'business recovery plans' in response to 'natural and man-made threats'. The article is amply illustrated with depictions of the emergency services in dramatic situations and concludes with an endorsement for companies to mirror the emergency services operational, tactical and strategic response system. HM Government had also recognised the broader issues of disaster, and in the Home Office (1999) publication *Dealing with Disaster*, large sections are devoted to detail of the ancillary issues of incidents such as section 5, 'Information and the Media', which goes beyond the narrowly focused business continuity interest in the recovery of IT systems.

The government's efforts were augmented by many industry bodies publishing their own advice such as: the Institute of Directors (IOD) guidelines (Nash, 2000); the Business Continuity Institute (BCI 2000); the Confederation of British Industry (CBI 1999), and the Department of Trade and Industry (DTI) (Power, 1999).

However, despite the Y2K catalyst which generated a considerable volume of debate comparatively little change to the processes and methods of conducting a BC project was generated. Then, for about 16 years nothing changed. This is not to say that nothing was done; far from it, a lot was done – it is just that what was done, was pretty much the same. It is difficult to account for the apparent stasis other than to iterate that there has been little effective to challenge to the basic processes adopted around the year 2000. Quite clearly it is not in the industry's interest to make too many challenges to a process that has been adopted by so many organisations. A detailed comparative of the contents of books on the topic is offered in table 2, A Comparative of Literature Development on page 130. The author, using the Microsoft Search Network (2000) on 20th June 2000, entered the key search words 'contingency planning'. The result offered six web directory sites and 54,977 web pages. 'Y2K contingency planning' accounted for some 18,414 entries in the aforementioned category and key words of 'contingency planning management' offered 49,307 hits. On 8th October 2013 the author entered the key words 'business continuity' on Google; the search raised exactly 29,000,000 results in 0.15 seconds. In terms of scale, or bulk, even taking into account the growth of the web, progress is quite evident. In terms of the development of ideas, progress is less impressive. This is a large claim that needs further evidence, and it is touched upon later in the review. For the sake of simplicity at this stage, it is argued that the content, format, style, process and method of business continuity planning has not changed in any significant way since about the year 2000. This contention is supported later in the work in an analysis that contrasts the topics and order of *The Definitive Handbook of Business Continuity Management* (TDH), (Hiles and Barnes,1999), with subsequent books and documents authored over a decade or so later.

The BCR discipline is broadly represented by the Business Continuity Institute and their influence on practice must be acknowledged. Whilst the processes might not have changed in 20 years, the Business Continuity Institute has grown from less than 1,000 members in 1996 to eight times that number in 100 countries today. The BCI should be deemed an authoritative source of information. Their perspective of the industry can be derived from their *Business Continuity Institute Horizon Scan Report 2017*. The terminology used from the outset consistently refers to 'BC and resilience professionals' (p.32). It claims 8,000 members in 100 countries. The demographic

annexes indicate that 78% of the 726 respondents in 79 countries worked as, 'business continuity or risk managers; in finance, professional services, public administration and defence and 'IT comms'. Notably, the vast majority, some 80% worked in Europe, North America and Australia.

Despite some diversity, it is a western centric discipline with a focus on the commercial sector. In terms of 'trends', the document claims that only 21% of organisations proposed increasing their budgets in this field in 2017, and it was estimated that "63%, more than 2 out of 3 organisations, use ISO 22301 in guiding their business continuity programme" (BCI 2017, p. 3). Naturally this is an incomplete picture of the industry as it only includes BCI members; suffice it to say that the number of people involved in BCR, in the UK alone, is significant.

As importantly, the BCI is engaged in a 'professional project' and uses the words profession, professional and professionalism 21 times within a few pages in their *Professional Ethics Guidelines* (BCI. 2018). If BCR is indeed professional, then it seems logical to expect the quality of literature to be of an appropriate standard. The logical corollary of the BCI's claims is that BCR literature should stand up to scrutiny along with established or acknowledged professions such as law or medicine. This ideal will serve to inform the penultimate chapter, wherein the degree of BCR professionalism will be used as an additional criterion with which to judge the literature.

Further evidence of the importance of BCR is reflected in the increasing legislation, regulation, governance and standardisation applied to or demanded of the discipline. Highly influential corporate governance reports requiring formal risk statements to be made by large companies were authored by Cadbury (1992), Hempel (1998), Turnbull (1999), and the Financial Reporting Council (2005) and (2012). These reports catalysed a focus on business continuity as part of the overall response to risk. The UK Government promulgates advice and encourages regulatory bodies to "reduce risk and increase resilience through the medium of continuity planning" (Gov.UK., 2016). Regulatory bodies including the Financial Conduct Authority (formerly the FSA) and the Solicitors Regulation Authority (SRA) proliferate, and corporate advice is offered by the Business Continuity Institute (BCI), the Bank of England (BoE) and the Institute of Directors (IOD), as well as by most local council authorities. Organisations operating

or responsible for critical infrastructure are bound by legislation (the *Civil Contingencies Act 2004*) to make appropriate continuity plans. In response to this impetus, self-help books are legion, and continuity forums blossom. While special interest groups (SIGS) like Business and National Government (BANG) or the BC Law Forum wax and wane, international standards (ISOs) are well established. The Cabinet Office (2013, (a) and (b)) maintains a National Risk Register and the Home Office (1998) and (2003) also issues advice. Even without a growing number of minor consultancies (all the 'big four' accountancy/auditing firms have a business continuity consulting practice), BCR has become established as a business in itself.

Plans and planners in context

The title of the thesis highlights the 'plight of the planner'. Just as all organisations differ so do the style and content of their plans. Similarly, the status and role of the planner within the organisation varies. Nevertheless, some academic consensus on plans exists and outline descriptions of the planners' role and corporate position can be made. Therefore, some consideration of consensus views on plans and an outline of the demographics of planners is required to complete the contextual backdrop to the thesis.

In reference to crisis management, (Fragouli et al., 2013) described a plan as a "documented set of activities and actions designed by experts, to be referenced when a crisis occurs to save time and maintain orderliness" (p. 369). The notion of it being written is common to most authorities on the matter. It was noted by Reason (1997, p. 49), having been expanded on in a little more detail earlier by Register (1987), that:

the importance of making written plans cannot be understated. Too often, however, plans to confront crises, if they exist at all, exist only in the minds of a few key individuals. (p. 74)

This endorsement of written plans is echoed by modern standards, and BS 11200 (2014) suggests that of the four key elements of preparation in crisis management, a plan is the first priority. "The...specific elements key to preparing for crises are: the crisis management plan" (BS 11200, 2014, p. 10). Therefore, this study focuses on what literature might influence the written response plans; whether they are called BC plans, DR plans or crisis responses, or even resilience responses, is unimportant.

The nature of adverse events being reason or cause for the invocation of a BCR plan varies considerably. The author has witnessed plans being invoked for data loss, abandoned babies, suicide in the atrium of a bank, and embezzlement of £1.2m by a partner in a law firm. However, the common themes are to safeguard people, premises availability, IT systems access and reputation. To achieve this a Business Continuity Management System (BCMS) is followed (*BCI Good Practice Guidelines*, BCI GPG, 2013). This process determines the strategy and scope of the project, reviews risk, identifies business criticalities and sets recovery times, and all this results in a plan that can then be rehearsed to prove its validity. Recent terrorist events have again broadened the scope of BCR and plans often include annexes for ‘active shooters’ and ‘people tracking’ mechanisms. Other supposedly ‘specialist’ areas of planning include disaster recovery site design and supply chain audit; however, most of these sub disciplines are or should be inherent in the plan.

Plan detail, format, cultural sensitivity, scope, processes, management systems, reporting mechanism and team composition varies tremendously from organisation to organisation. The only tenable generalisation in the UK is that there will probably be three elements to management responses which would be controlled by strategic, tactical and operational teams, as advocated by the Home Office (1999).

Interestingly, the claimed benefits derived from having a plan are surprisingly scant. In 1871, unusually for an ‘arch planner’, Field Marshall von Moltke observed that “No plan survives contact with the enemy with any certainty beyond the first contact with the main hostile force.” Hughes (1993, p. 92). However, von Moltke was not implying any futility in planning, merely that it does not offer certainty of outcomes. The sentiment that the value of the planning process is worth more than the resultant plan comes from both an academic and a military source. Boin, t'Hart, Stern, & Sundelius (2005) suggest that “crisis planning helps more than crisis plans ever will in coordinating crisis response operations” (p. 146). However, Eisenhower pre-dated this notion in his widely attributed remark, cited by Bland (2013, p. 58) that: “In preparing for battle I have always found that plans are useless, but planning indispensable.” It is also worth noting at this point that the analogous doctrines, policies and procedures of military planning appear to have been studiously ignored by almost all BCR commentators.

The corollary question is: what manner of person is doing the planning and what managerial status do they enjoy? Barclay Simpson specialise in corporate governance recruitment, and their *Market Report Security and Resilience* (Barclay Simpson, 2017) is an ideal reference to explain the nature and role of the BCR manager. Interestingly, the document's title gives primacy to 'security' under which sits a resilience function, largely represented by the business continuity manager. Although Barclay Simpson is a commercial company with vested interests, the report is relatively bias free and includes negative evidence. Their summary of market analysis notes: "Resilience recruitment is steady but down on the recent past... Crisis management is a developing area...falling somewhere between corporate security and resilience" (p. 8). Additionally, the burgeoning need for cyber security experts was noted constantly in the report (p. 12) and that "resilience consultancies continue to grow particularly within the big 4" (p.18). This brief catalogue illustrates the multiplicity of roles and ill-defined reporting lines.

In terms of income, a head of business continuity in "a major financial services group" (p. 21) might expect an income of between £100-150K (in London), one of the top earners in the corporate governance security section of the Barclay Simpson report. Paradoxically, however, a business continuity consultant is the least well remunerated of the related consultant categories, albeit still at £500 per diem in London. So, in summary, the most senior of business continuity managers is relatively well paid, comparable to the pay of a Brigadier in the British Army at £102K pa (Armed Forces, 2018), who commands up to 7,000 staff. But strangely, whilst this elite but often academically unqualified group earn considerably more than the highest paid 'salaried GP' at some £85K (BMA, 2018). their role still lacks the essential cachet of a 'profession' which is enjoyed by both the medical and military professions.

This Barclay Simpson analysis presumes that the BCR manager is a specific role. The author's own client base is very diverse ranging from cheese factories to major law firms and mining conglomerates. Approximately 40% of clients do not retain a specific BCR manager. The role is distributed between the following functions: security; compliance; H&S; facilities; legal; IT; insurance, and, in one rare case, HR. In most of these cases the practitioners are not members of the BCI nor are they academically

qualified. Their BCR duties are an adjunct to their primary role, and it is especially interesting to determine, in so far as it is possible, what literature might appeal to them and thus influence such practitioners.

The development of BCR

Wong (2009) and Elliott and Johnson (2010) reported an abundance of literature on BCR and this study is an examination of the quality and therefore utility of the literature in so far as it informs the planner. Consequently, it adopts the criteria of Saunders et al. (2009) that “Unlike some academic disciplines, business and management research makes use of a wide range of literature” (p. 61).

But the development of knowledge on the topic was noted as ‘shaky’ in the dedication to *Key Readings in Crisis Management* (Smith and Elliott, 2006). They observed that many years earlier “the body of literature was felt to be too much in a state of flux to produce a book that would do justice to the complex nature of risk”. (p. x) It was notable that of the 23 “truly seminal” chapter selections for inclusion for publication, some 18 chapters had been authored prior to 1994. This appears to echo a decline in ‘seminal publications’ and it is contended that little, at least in terms of process development, appears to have happened between 1999 and 2017.

Yet the existing processes, which have not been validated academically, Boin (2006), are being ‘standardised’ into ISOs, which risks ‘cementing’ dubious processes into best practice. The academic work on the topic filters osmotically to inform practice, but the extent to which many theories are incorporated in practice is debatable. Additionally, it appears that the discipline lacks underpinning doctrine, as opposed to theory, and that some existing military literature has gone almost unremarked in the development of practice; this will be debated in the concluding chapters. Thus, the study has the requisite degree of importance, and its potential to develop insights and new understanding of the field is evident.

Recently BCR has gained a growing level of academic interest. The BCI has allied itself closely with Buckinghamshire New University, and although BCR specific courses remain scarce in comparison with mainstream topics, the universities in the following locations offer courses which are complementary to BCR: Nottingham, Liverpool, Cranfield, Coventry, Portsmouth, Leicester, Benfield Greig Hazard Centre,

and University College London (Barclay Simpson, 2017). In addition to trade press magazines, peer review journals have been established, the *Journal of Business Continuity and Emergency Planning*, a quarterly, 100-page journal published by Henry Stewart Publications. One might term the academic underpinning as 'more than embryonic but less than juvenile'. Courses exist, but they have differing emphases, focus, origins and interests. As Toft and Reynolds (1997) noted the management of fortuitous and organisational risk "is not a mature activity" (p.1), and the passage of 20 years does not necessarily vouchsafe full maturity.

In all this time, academia has hesitated to quantify any financial advantage in BCR. In reference to the earlier work of Knight and Pretty (1997), an analysis of share prices before and following incidents, it was observed by Cockram and Van Den Heuvel (2012) that

... the losers sustain approximately 15% drop in value, winners transform their crises into value-creating events (up to 15%) and emerge with enhanced reputations. (p.15).

But Fragouli, et al. (2013) were slightly more cautious in their endorsement of planning:

it can be implied that any organisation which lacks appropriate crisis management preparedness outlined through a CMP will suffer greater losses. (p. 369)

Nevertheless, according to Burnett, (1998), "crisis management has become a booming industry" (p. 475) and insurers and auditors advocate BCR planning of some description, even if they are strangely reticent to value it in terms of reductions in their premiums.

Discussion

Essentially BCR is a comparatively new discipline which has grown quickly over the last two decades. This growth has been accompanied by a broadening of the scope of its activities from its origins in IT mainframe recovery to the current wider remit of resilience. Whilst BCR practice is encouraged by HM Government and alluded to in corporate reports it lacks regulatory or legislative compulsion and has no barriers to

entry to the profession. The standards which have been developed to support BCR have the benefit of being a common point of reference, but they risk becoming a 'tick box' exercise which does little to vouchsafe the quality of plans. Indeed, some commentators perceive standards to be counter-productive in that they inhibit innovation and creativity in the planning process which was advocated by Lengnick-Hall, Beck & Lengnick-Hall (2011, p. 247) and the standards promote the idea of a direct and linear process which is the antithesis of Kay's (2011) oblique and flexible approach to managing the complexity of the event.

As a new discipline it has taken considerable time for any academic work to permeate to inform its practice and the main source of guidance stems from the trade association the BCI. The discipline's infancy is demonstrated by a focus of semantic debate which indicates an attempt to achieve cognitive commonality but little challenge to or development of processes has taken place. Albeit some high-level consensus exists as to the idealised plan, the plan remains an 'end in itself' and BCR has so far failed to capture strategic recognition within most organisations. Three reasons might account for this. The first is that motivational factors for BCR are reported to be external and transitory in terms of durable effect. The second factor is the planner, with a multiplicity of roles and ill-defined reporting lines often lacks the corporate authority to effect significant change in the implementation of plans. The final factor is that the planner is of insufficient calibre to have the mind set to develop a strategic approach to BCR. However, it could be argued that the development of such an approach would depend on BCR having an effective paradigm on which to base any planning. The implication of this apparent lack of a paradigm is a critical issue that is central to the subsequent examination of the BCR literature.

Whilst a great deal of discussion has been undertaken within the paragraphs of this chapter, it has outlined a comprehensive context of the nature of the industry, its origins, development, influences, issues, contributors and practitioners. This allows the subsequent debates to be seen against the backdrop of the industry and thereby the analysis is more purposeful and informed. Most importantly, it places the planner at the centre of the debate and demonstrates their 'plight' when confronted with a morass of literature, regulations, guidance, best practice and standards.

Chapter 4 BCR as an academically informed profession

Introduction

If BCR is a profession, then one might expect to discover strong academic underpinning foundations. Consequently, this chapter is designed to challenge the degree of influence of academic work on professional practice, what utility it maintains and what it suffers in its application to a plan.

The format of the review in this chapter is three-fold. Firstly, a description of the materials is offered, followed by an assessment of its quality based on the criteria established in the methodology chapter (usually the criteria outlined by Minger (2000) will not apply as academic quality is assumed). Finally, an assessment of the degree to which it offers utility to the planner is suggested.

The academic literature is categorised in terms of its specificity and utility to the planner. The chapter first deals with the issue of utility and then considers the literature which is focused on BCR practice and a crisis management approach to it. Secondly the literature considered to be significant in academic terms is reviewed. Finally, literature which offers retrospective insights, thereby informing future planning, is debated.

BCR specific literature

The relationship between academic work and professional practice is an uneasy one. Westley and Mintzberg (1989) mused on the transition of concepts from practice into research and what was lost in the process.

A strange process seems to occur as concepts, culture and charisma move from practice to research...these concepts as they enter academia become subjected to a concerted effort to force them to lie down and behave, to render them properly scientific. In the process they seem to lose their emotional resonance, no longer expressing the reality that practitioners originally tried to capture. (p.17)

The reverse is probably true; one can imagine the despair of academics as their carefully constructed research is misquoted, unattributed, or popularised to fit practice.

At particular risk seems to be the literature that has coined a term to describe the result of the research. Prime examples are: Janis (1982) 'Groupthink', Toft and Reynolds (1997) 'isomorphic learning', Taleb's (2010) 'Black Swan', and Adams's (1995) 'homeostasis'. Perhaps because of their brevity, they can be used easily and inappropriately as 'factoid soundbites'. However, the genuine difficulty encountered by practitioners in applying academic work uses the analogy of osmosis, whereby academic work filters in slowly to underpin practice. A good example is to be found in BS 11200 (2014), wherein section 3.2 deals with 'The potential origins of crises'. It is an encouraging but, in some ways, rather forlorn attempt to backfill some information to assist the planner. It is clearly redolent of at least three of the academics quoted in this chapter (Borodzicz, Turner and Toft), but this cannot be said for certain as the academic works remain un-attributed in the standard. This illustrates the osmotic movement of 'ideas' (for want of a better term) from a high concentration of academic content through a semi-permeable membrane of commercial interest to a location of low academic concentrations. 'Commercial interest' is introduced here as being the 'semi-permeable membrane' required of osmosis. The selection of 'commercial interest' is based on the comments of Gower (1997) who, as a tutor of Scientific Method at Durham University, lamented that "some sorts of enquiries are deemed more important by those who pay" (p. 3).

The utility of a piece of relevant academic work to the planner can be best expressed as the ease with which the work can be applied to the planning process. The contention of this thesis is that a lot of academic literature is either difficult to apply or worse still it has been ignored completely. An adjunct to this proposition is that much of the academic work that does survive the transition to practice is so diluted as to become little more than a homeopathic reference. Two examples are offered below to illustrate this contention.

The work of Tversky and Kahneman (1992) is incredibly complex, but it makes a clear differentiation between decisions made under either risk or uncertainty. I would not expect any BCR planner to be familiar with the work, but this differentiation is lost in (BS 65000, 2014, p. 2) where risk is defined as "the effect of uncertainty on objectives". The authors then offer five clarification notes which also define uncertainty and

objectives. These illustrate the genuine difficulty when academic work fails to inform practice and its application is forlorn.

Similarly, Lagadec's (1997) advocacy of sensitivity to weak, ambiguous alarm signals as precursors of incidents is potentially influential to planning but very difficult and arguably costly to apply. For example, he notes:

What is missing is the characteristic feature of an emergency: a clear trace that would justify triggering the warning procedures and mobilising resources. Lagadec (1997, p. 25).

Given Lagadec's statement, one can appreciate the difficulty of devising a reliable method whereby ambiguous signals would not also create false alarms. It is incredibly difficult to apply this in practice.

Since 1996, the author has never been asked by any client to include any such theories or concepts in a plan or even to be mindful of them in its authorship. The themes that we will see emerging time after time are that pure academic articles tend to require purposeful application and manipulation to inform resilience practice. They are of limited appeal, often soundbite summarised and are little read beyond relatively few academically-qualified practitioners.

Smith and Elliott (2006) included twenty-three essays in their classic reader on 'Crisis Management'. Eighteen of the twenty-three essays selected, almost 80%, were published prior to 1994. As Saunders et al (2009) proposed that "...as information flows from primary to secondary to tertiary sources it becomes less detailed and authoritative but more easily accessible." (p. 68) one might therefore expect, that these works would, by 2006 or at least by 2018, be informing professional BCR practice and that their influence might be evident in the plans and standards that have developed subsequently. In assessing if this is the case, there is of course a critical difference between an 'absence of evidence' for this proposition and a far more powerful argument of the 'evidence of absence'. In the first case one just accepts that no evidence is apparent, in the second case one purposefully searches out evidence for the proposition that such works influence practice and, in this case, finds that there is indeed evidence of absence.

The Good Practice Guide and relevant International Standards reference none of Smith and Elliott's carefully selected authors. BCI and HMG guidance is similarly devoid of references to these works albeit one can not discern how they might have influenced their author's thoughts. The definitive guides such as they are, except for Heath (1998), only referenced to trade press articles also show no evidence of having been informed by these works.

The reason that there is an evidence of absence of these texts informing practice is perhaps due to three factors. The first is the division of the texts by Smith and Elliott into sections, in which only section 4, with four authors, is entitled '*Crisis management in Practice*'. Thus, they implicitly admit the difficulty of applying the other nineteen works to practice and in this case the practice of planning. The second explanation for the evidence of absence of these works in practice is also implied by Lindstedt (2007) and Wong (2009) who outlined the strategic and managerial requirements of planners who could struggle to apply the nineteen more theoretical essays in the reader. Finally, one might also suppose that given the diversity of backgrounds of BCR planners, Barclay Simpson (2012), that those who hail from other disciplines such as security, IT or facilities might not reasonably be expected to have read this reader.

From the 23 essays, two have been selected to illustrate the proposition that despite the reader's persuasive power and high credentials the articles have not as Saunders et al suggest flowed into accessibility for the planner. The first essay is by Boin who writes seeking the paradigm for crisis management, the second considers one of the 'Crisis Management in Practice' articles by Smart and Vertinsky.

Boin (2006), cited in Smith and Elliott (2006), offered a chapter on '*Organisations and Crisis*'. For the practitioner this is pleasingly easy to read. On (p. 86) Boin makes a disarming admission that "Academics rarely agree on key terms". He develops this argument to explain (p. 87) that this caused a disposition amongst early authors to engage in inductive searches for general theories. Whilst helpfully explaining the tendency towards semantic debate that the industry maintains, he also explains the 'ubiquitous' nature of crisis and relates his thoughts precisely to Turner, Perrow and Shrivatava, whose concepts he summarises beautifully. He concludes by arguing that "Empirical research is scant...a situation that favours style over substance...these articles must be tested in empirical research". (p. 94). Boin essentially has just

summarised the author's argument that, the utility of many great and worthy academic works is limited and by implication much of the 'grey literature', which is examined later, lacks any rigour by being uninformed by these works.

Smart and Vertinsky's (2006) chapter deals with '*Designs for Crisis Decision Units*'. Their commentary touches on many of the topics outlined elsewhere in this thesis in chapter five, for example, the cognitive process, information distortion and group decision making. They take their work one stage beyond Boin by offering detailed summaries in Table 1 (p. 331). Thankfully for practitioner purposes, these are easy to assimilate. Their identification of the problems and their description of the "Characteristics and symptoms" are excellent. Unfortunately, their "Prescriptions" for the solution might appear slightly naive in practice. For example, they note that a crisis response group might have "Reduced cognitive abilities as a result of increased stress". (p. 331) One of three "prescriptions" they offer is to "Develop stress profiles on leaders and use stress reduction techniques (TM [Transcendental Meditation], relaxation)". This appears to be their own rather personal solution to the issue they identified and as such it might lack credibility in the workplace. It remains questionable if a practitioner of limited 'rank' in an organisation could persuade a Board or Exco to indulge such practices and consequently its utility to the planner is impaired. The 'real politick' is that Smart and Vertinsky are wholly correct in everything they propose but its application in most organisations would be either impossible or career limiting.

The comments above are not meant to denigrate any of the authors' work, rather, they argue very strongly indeed for a greater cooperative effort by academics and practitioners to author together applicable and realistic texts.

BCR a crisis management approach

This broadening of the BC process in the name of resilience is not unwise despite finding little favour with Lindstedt (2007). The inclination to broaden the perspective was academically considered before the burgeoning influence of ISO 22301 since its publication in 2012. Elliott, Swartz and Herbane (2010) and Elliott et al. (2010) in addressing business continuity from the perspective of crisis brought a partly new dimension to the debate. They have glued into the mental framework of planning a

degree of structure and proactivity that hitherto was hard to determine and is indeed absent from many of the documents used by most planners. They summarise the crisis management approach, and those elements of the approach germane to the planning process and which inform questions are outlined below:

1. Emphasise the contribution that managers may make to the resolution of interruptions.
2. Assume that organisations themselves may play a major role in 'incubating the potential for failure'.
3. Recognise that, if managed properly, interruptions do not inevitably result in crises.
4. Acknowledge the impact, potential or realised, of interruptions on a wide range of stakeholders.
5. Clearly recognise that a crisis unfolds through a series of salient phases, often providing managers with several points at which an intervention can be made to limit the impact of the threat faced by the organisation. (p. 4)

These give rise to several critical questions as to the way or nature by which such issues are reflected in the plan or the planning process. For instance, Elliott et al. (2010, p. 117) note with approval the anticipation of events and a commendable lack of corporate complacency by Virgin Atlantic, who have a web page in reserve (ironically partly written by this author) ready to be released in the event of an air accident. Such broadening of the concept, whilst perhaps not intentional, can be seen to be validated by Elliott's work and appears, at least presently, to be the future direction of the discipline. This document has considerable planning utility, the advice is logically derived and clearly presented. Notably, it verges on being akin to laying out some principles of planning. For example, point 5 above suggests that the plan itself could be phased to reflect the crisis unfolding. This is practical, useful advice to a planner.

Significant academic contributions

In some contrast to literature designed specifically for the BCR practitioner there is a body of work that is seminal in most university courses on the topic of BCR. These works are not prescriptive, they are more suggestive of considerations to be taken into account in the planning process. Their influence remains considerable, albeit the

tangible effect of their consideration is a lot less easy to determine in the planning process.

Isomorphic Learning

Twenty years ago, Toft and Reynolds (1997) identified several issues concerning the effective planning for contingencies. They noted the immaturity of the academic analysis of risk management. They observed that if the degree to which academic tuition is available is an indicator of maturity of a topic then the management of fortuitous and organisational risk is "...not a mature activity..." (p.1). They considered the human and organisational factors that inhibit effective risk management. They debated the subjective nature of risk and the eclectic response. Toft and Reynolds (1997, p. 4) also gave a useful summary of the major problems of risk management, which could be said to bedevil resilience planning as well. They are paraphrased below:

- The dispersal of the hazard concealing its extent and frequency.
- Litigation hindering disclosure of information.
- Staff embarrassment over their responsibility.
- Information available not being amenable to analysis.
- Difficulty in dissemination of lessons.
- Management not learning through experience.
- The impossibility of quantifying ignorance.
- The unreliability of past experience in predicting future performance.

One is tempted to think that this work is more recent than 1997, reflecting again the impression that little has changed. However, the work of Toft and Reynolds (1997) must be viewed from the perspective of how their research can be utilised to improve the planning process. They summarised their essential argument as

Organisational learning may be defined as a cumulative, reflective and saturating process through which all personnel within organisations learn to understand and continually reinterpret the world in which they work by means of the organisational experiences to which they are exposed. (p.18)

Importantly they also note (p. 88) the perils of poor organisational memory, whereby invaluable lessons, due to incremental changes, drift over time into “organisational forgetfulness”.

Therefore, the importance of Toft and Reynolds’ (1997) work to BCR planning is that an organisation which has a retentive corporate memory would incorporate such lessons and knowledge in their resultant plans. This allows them to actively anticipate incidents, and predetermine to some extent, and to initiate a response structure for them. Perhaps Toft and Reynolds’ enduring legacy is the plea for ‘isomorphic learning’ to occur so that the lessons from one industry can be applied to another. This is not often evidenced in the eventual plan but rather in a change in the mindset of the planner, which does influence planning considerations. The increasing use of the case study from the original and influential Hiles and Barnes (1999) *Definitive Handbook* to the more recent and very well researched (BP, 2006) *Booklet 14* (comprising a catalogue of various incidents and lessons learned) reflects this desire for isomorphic learning.

In this case, the essential academic idea has withstood the translation into practice. This successful transposition is perhaps due to the basic simplicity of the idea (often attributed, incidentally, to Bismarck) that the wise person learns from the mistakes of others.

Turner’s six stage model

An academic whose work is universally highly regarded and whose ideas should be applicable to resilience planning is Turner (1978). Briefly, he proposed the following model to explain the ‘pathology’ of disasters:

Stage 1 – Notional Normal Starting Point.

Stage 2 – The Incubation Period.

Stage 3 – Precipitating Event.

Stage 4 – Onset.

Stage 5 – Rescue and Salvage.

Stage 6 – Full Cultural Readjustments.

His work was highly influential on other academics, notably Perrow, Toft and Borodzicz. The systems theory approach to the examination of disasters and potentially improved planning for the future should be highly informative to the planner, but the elegance of the work of Turner must be balanced against its utility. The work of Turner (1978), *Man-Made Disasters* and the concept of the failure of socio-technical systems, was arguably seminal in this field, and his 'Six Stage' model has withstood the scrutiny of time and has shaped many public and judicial inquiries into disasters. However, the complexity of organisations is a major issue as noted by Browning and Shelter (1992), and despite favourable endorsement by subsequent studies, Toft and Reynolds (2005), Cox and Tait (1991) and Horlick-Jones (1990), the sheer complexity and interdependencies of modern systems with myriad permutations militates against easy analysis of the systems in advance of failure.

Turner's model is not simply difficult to apply because of complexity of systems that have evolved; (A point emphasised by Kay (2011)), the model itself is retrospectively oriented. In this model, latent defects incubate over time until a 'precipitating event' causes disaster and finally a learning process occurs. The snag lies in the application of such a model to current planning processes in a complex organisation. As a tool for planning it is difficult to apply. The problem is the near impossibility of being able to know or understand that which is not known or understood by the organisation concerned. For example, how can 'unnoticed events' (in stage two of the model) become noticed? Although the model is useful in challenging the organisation to be self-questioning, it does not, in itself, provide a predictive risk management framework that can be utilised easily in the planning process. Add to these factors the comments of Elliott and Johnson (2010) that "few of our respondents reported a strategic approach nor did many appear to possess the necessary tools or mind-set to develop such an approach." then one can appreciate why Turner's work is seldom contemplated in advance of any incident.

Risk Homeostasis

The success of the 'soundbite academic work' is rare but fortunately Adams (1995), who referred to 'risk homeostasis' or the 'displacement' of one risk for another, survives translation into practice. The metaphor of a lump of clay is appropriate. Apply pressure in one place and the clay moves and alters according to pressure and

direction, but the lump retains the same volume and mass. In the same way, the net risk might remain the same despite focused actions in one specific area. If there is an application to planning, it is that an awareness of the phenomena might promote a more balanced risk assessment and an avoidance of scenario-based planning that ironically risks displacing risk.

This notion seems reasonably well appreciated by practitioners who have seen the concept reflected in trade press and text books. Consequently, there has been a discernible move away from scenario-based planning to a broader more generic approach as advocated by Darling (1994, p. 7), Boin and McConnell, (2007), BS 11200, (2014, p. 10), Regester, (1987, p. 75), Smith, (2013, p. 7) and Heath, (1998, p. 255). However, it does question if this was due to Adams's work or whether 'fashion' dictated such a shift. Again, like Toft and Reynolds' (1997) 'isomorphic learning', a simple but sound academic concept can survive the osmotic membrane to inform practice. Whether this is because of the essential simplicity of the idea or its phraseology having some intuitive appeal is less easy to determine.

Social Capital And Supply Chain Resilience

If following Boin's and Lindstedt's pleas, academic interest was not on the validation of the BCMS processes, then where was its focus? Two related issues had gained prominence which added new dimensions to BCR. The first was the burgeoning notion of 'social capital'. Almost every commentator on the matter has sought to define it but Burt (2005 p 5) conveniently summarised Putnam, Coleman and Bourdieu's commentaries and suggested that they would agree on the metaphor that, 'social structure is a kind of capital that can create for individuals or groups an advantage in pursuing their ends. People and groups that do well are somehow better connected.' The second area of growing attention is, perhaps since the Nokia /Ericsson, Phillips supplier failure in 2000, the 'elephant in the room' of 'supply chain risk management', Norrman and Janssen (2004), or what might now be termed supply chain resilience. Interestingly both topics are related; Uzzi (1997) highlighted that increased social capital strengthened supplier networks, (notably in this case with entrepreneurs' bankers hence the essential relationship between social capital and supply chains), and Cohen and Prusak who noted that,

The size and intricacy of organizations, the proliferation of critical information, and the increasing complexity of tasks make connection and cooperation—social capital—increasingly important. (p.13)

Despite their evident relationship it is easier to deal with the two topics separately.

Social Capital

Dealing first with Social Capital, the term was first coined, according to Cohen and Prusak (2001), in a discussion of school community centres in 1916, so, theoretically, it has had plenty of time to mature academically. In its current incarnation it offers an intuitive appeal to many businesses, the implications of 'organizational advantage' as described by (Nahapiet and Ghoshal 1998) and their 'relational' aspect of social capital which hints at a competitive advantage gained thereby are of obvious commercial appeal. The cosy, trusting relationships described by (Cohen and Prusak 2001) in their case studies echoes most case studies used in this field where notably 'communities' come together in the face of adversity is an attraction to any resilience planner. The concepts offered by (Adler and Kwon, 2002) and the community responses catalogued by the Liverpool Report implies that the 'banked' social good can be used to generate positive, cooperative responses in the face of adversity. This sounds like an almost Arthurian 'Holy Grail' for a planner where all the goodwill they have nurtured and built up over the years is returned 'karma like' in their time of adversity, when they most need help.

It also sounds faintly naïve and one might reasonably suppose that since 1916 some common metric might have been developed to measure and demonstrate the claimed advantages and that companies might publish their social capital rating in the same way they proclaim their 'triple A' ratings and similar financial measures of approval. However, perhaps paradoxically whilst some embryonic ratings, based on corporate social responsibility endeavours exist, few such ratings which are internationally recognised are published by companies, and, as this thesis examines the plight of the planner, we must examine why no such quantification appears to be available.

Academic explanations are plainly evident; social capital is despite its potential advantages both ephemeral and occasionally counter-productive. In their balanced critique of social capital, Cohen and Prusak (2001) came close to echoing the ideas of Janis and 'groupthink' when they suggested that it could generate too cosy a relationship which thereby inhibited dynamic debate and consequent innovation. Other commentators have suggested that it is simply too difficult to measure and perhaps the critique of Coleman (1988) offers the best explanation of the comparative lack of uptake of social capital by many companies. In essence Coleman argues that the intangible nature of social capital when compared with financial, physical or human measures makes its attainment slightly ephemeral. Perhaps controversially, Coleman also saw the creation of this type of capital as inadvertent or unintentional. It is therefore little wonder that aside from the very pertinent and commendable examples offered by some case studies, (largely of physical, geographical communities in adversity), there appears to be little focus on this issue being manifested by fiercely competitive organisations.

Thus, despite the identification of the advantages of social capital and its clear direct bearing on critical supply chains the planner is left with a conundrum. Social capital sounds like a good idea but it can be counter productive, and it is almost impossible to measure. It is little wonder therefore that in times of economic stringency, building social capital does not appear to be a priority for the BCR planner. Albeit a slightly personal perspective, in 23 years as a consultant neither I nor my six colleagues have been asked to assess any client's social capital in respect of their resilience.

Supply Chain Criticality

In dealing with the second issue; supply chain resilience, or supply chain risk management, has clear links to BCR which were established by Norrman and Jansson (2004). As Christopher (2016) implied, it is perhaps impossible to understate the criticality of globalised supply chains in an increasingly internationalised trading environment. They are not merely important to the company or organisation concerned but to the consumers themselves and this issue should be uppermost in the minds of BCR planners.

In terms of definitions, it is most helpful to note the basic complexity, fragility and criticality of the supply chain issue as described by Chopra and Sodhi (2004) as a,

delicate balancing act to keep inventory, capacity and other elements at appropriate levels across the entire supply chain in a dynamic, fast-changing environment. (p. 53)

and its path to resilience is achieved by,

continually stress testing their supply chains and tailoring reserves, managers can protect and improve the bottom line in the face of many types of supply-chain risks. Like Ericsson, smart companies do not wait for lightning to strike twice before taking action. (p. 61)

If resilience can be termed a response to threats then the threats to the supply chain are perceived to be global, wide ranging and, admittedly with the benefit of hindsight, immediately following 9/11 the risk posed by international terrorism was commented upon by Sheffi (2001) and echoed later by Christopher (2016) with his prediction of globalisation of supply chains. The proposition therefore that supply chain resilience is an essential consideration for any BCR planner would appear to be almost self-evident. The very nature of organisations, their dependency on supply chains and their fundamental symbiotic links through them to other organisations suggests that the preservation of such links through BCR measures would be axiomatic. However, what should be the case, is not always so.

Perhaps the most comprehensive, authoritative work on global supply chain management was authored by Christopher (2016). The work highlighted (almost in social capital terms) 'the relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole'. Christopher also proposed that globalisation of the supply chains is inevitable and a 'wider perspective' to manage the 'complex web of relationships' is required. (p.3). Christopher (2016 p 3) noted several interesting points. The first is that supply chain management is, relatively speaking, a new concept being brought to prominence in 1982 by authors Oliver and Webber writing for the consultancy Booz Allen Hamilton. They coined the phrase, 'supply chain management' and implicitly therefore its preservation. One can

make a good argument that the management and resilience of supply chains is so important it might be deemed a separate and distinct discipline with its own body of informative literature. Several companies retain staff specifically to manage the supply chain and the internal corporate departmental tensions in it which were commented on by Oliver and Webber. However, in other companies the mantle of dealing with at least supply chain disruption has fallen to the BC managers. Evidence for this proposition is identified in the BCI who by 2018 had published 10 annual summaries on what they term 'Supply Chain Resilience Report (2018)'

Naturally areas that are more prone to potential disruption and consequently the interest of insurers have attracted considerable academic attention. Lloyds has joined this movement and some of their literature authored by (Bichou, Bell and Evans 2007) places a commendable emphasis on practical shipping guides which are informative and usable whilst being academically informed. Complementing the baseline of guides, several detailed sub specialisms such as maritime logistics and port operations on which so much supply chain movement depends have arisen and considerable detailed insight into the relationships of the parties involved has been gained. An example of this genre is (Kwesi-Buor, Menachof and Talas 2016) whose work suggested an important relationship between the regulations and the industry actors'

It is therefore clear that supply chain management and resilience is a hugely important aspect of any BCR planner's remit. However, in addressing the plight of the planner the existence of considerable academic thought on the matter does not vouchsafe a coherent and diligent response. Nevertheless, so important is the matter of supply chain resilience that the BCI have devoted considerable effort to producing a series of annual reports on the matter the BCI Supply Chain Resilience Report (2018).

The 'call to arms', of the well-established Supply Chain Resilience Report (2018) commentaries had a commendable response with 589 respondents in 76 countries. Just over half of the respondents had had some form of supply chain disruption in the last year (mainly at tier one level, that is to say their immediate suppliers). Of the respondents, 62% reported the incident's total cost an estimated at less than €50,000, (p 18) Almost 20% of respondents were happy to accept take the financial impact

without insurance and a rather puzzling 52% did not know why the insurance did not cover the loss!

Interestingly the report was quite self-critical and it highlighted ISO standards, 'top management commitment' as evidently a key factor. On page 3 it was noted that 'strong top management commitment ...declines from last year (41-33%). Furthermore respondents...do not analyse the full extent of their supply chain in case of disruption compared to last year (from 22 to 30%), a feature described as 'shocking' on page 4

On page 4 Jean-Pierre Krause, Global Head of Risk Engineering at the Zurich Insurance Company noted that,

In many cases it would appear that many businesses do not really know who is supplying their key components and materials beyond tier one and have no practical contingency plans in place to deal with a disaster should it occur.

This seems to imply that despite the availability of compelling literature such as the arguments of Kwesi-Buor, Christopher, Sheffi or Norrman and Jansson the attention devoted by some planners to the intricacies of supply chains is limited. Perhaps it is worth putting this in some form of comparative context so as to appreciate why this might be the case as it appears to be counter intuitive. First the respondents were members of the BCI but 589 responses out of 8,000-10,000 members, just over 7%, suggests some lack of concern or disconnection with the topic by the membership. However, 62% of 589 respondents losing up to € 50,000 each gives a maximum possible loss for this section of respondents at just over €18million worldwide. It almost appears that there is an apathetic acceptance of the unlikely event occurring and a total likely loss of less than €50,000 at the individual corporate level. This 'uncomfortable truth' might be to do with the fact that the cost of employing someone to remedy this small and unlikely loss is simply not worth it. Add to this the two thirds of 'top management' who only manifest disinterest in the topic and even most of those who are interested only looking as far as tier one suppliers and it paints a curious anomaly of a picture of how critical supply chain risk is really viewed by the BCR planner.

However, the commercial world seems to be increasingly split, if not neatly, at least into two groups. The first group is the very heavily supply chain dependent and the second group are those almost virtual companies which appear to have no need of specialist supplies aside from connectivity e.g. Colt, Verizon, Amazon, Microsoft, over which they exercise virtually no control. The first group are typified by companies that for instance depend on shipments of a single product or item, for instance regular biomass shipments from China to Irish power stations or reprocessed material to nuclear power stations. Other members of the first group include the incredibly diverse complex global supply chains which typify supermarket chains. Albeit one can argue that the former should stockpile biomass or refined plutonium and the latter can run out of a few products without imperilling the viability of the whole organisation the second category is perhaps a product of modern times. Whereas, a hedge fund, for example, has almost no supply chain that cannot be sourced easily and quickly elsewhere; premises, systems, access, staff even are all relatively easy and quick to relocate or even replace. It would be convenient to presume that the BCI sample came from those organisations with less supply chain dependency and that corporate security precluded those with more significant events from declaring them. Unfortunately, this notion remains surmise as the study did not concentrate on this growing disparity of supply chain typology.

CONCLUSION

In respect of its academic credentials, the BCI 2018 report on supply chain was, once again, entirely unreferenced. It appears that the difficulty noted elsewhere in the thesis of the application of academic research in this area remains problematic. Once again, we are left to surmise that of the 294 responders who had actually had a supply chain incident few are concerned enough to go beyond cursory examination of their tier one suppliers. Perhaps as puzzling is the inclination, yet again, to conflate terms. The same table of threats that is used in other BCI horizon scanning studies is replicated and commented upon in the context of supply chains and not unsurprisingly cyber-crime and hacking is now seen as a major global supply chain threat.

Even despite there being a raft of germane academic material to inform supply chain resilience it appears that the BCR planner, if typified by the BCI membership responders, is unaware of a lot of the available literature. However, unless the

message is interesting, pertinent and makes cost savings the message could be lost on a commercial organisation. Just as is the case with the other analysis of the BCMS process in this thesis, social capital and supply chain management perhaps share the fate of other academic endeavours of not being easily applicable to the strategically limited BCR planner of the commentaries of Wong (2009), Lindstedt (2007) and Elliott and Johnson's 2010 report.

It is worth noting here that even the most well informed of advisors or consultants on BCR have omitted the vital area of supply chain management. The recent HE resilience guidance document *Resilience in Higher Education Institutions* (2014) makes no reference to social capital and supply chain resilience is entirely omitted. It is not that the two topics are mentioned in passing, they are absent from any word search or physical scrutiny. Whilst one might suppose that Universities with burgeoning league table obsessions should be interested in their social capital rating and concerned over many of their complex international supply chains. Nevertheless, the template for universities, written by Drs Eyre and Easthope and the 'project owners' being the Association of University Chief Security Officers makes no mention of either issue.

Disturbing as the omission above might be, it is impossible to argue with any credibility that supply chain should not be a critical aspect of a BCR planners work in globalised supply systems, be they physical or virtual. Yet the conclusions of the report seem to suggest some worrying issues. The numbers of respondents were numerically high but a small proportion of the potential responders. Losses were comparatively low and the degree of scrutiny of supply chains was largely limited to tier one suppliers. Possible explanations include, the mind-boggling complexity of extensive chains, a disinclination to disclose possible losses and perhaps a lack of understanding of how the problem might be analysed and quantified and therefore justified to management.

In a similar vein social capital certainly does not have any ease of application, utility, quantification or established tangible benefit to the planner. In contrast supply chain resilience has a raft of supporting academic validation and several proposed and pragmatic methodologies that would satisfy Lord Kelvin's plea for measurement.

Explanatory studies

For want of a better term, 'explanatory studies' ranks third in terms of influence on planners. They are not specific instructions, nor are they a priori considerations. They are tools whereby prior errors can inform future planning or, they can compensate for the complexity of the organisations concerned. However, given the limited strategic grasp of the practitioner, described by Wong (2007) and Elliott and Johnson (2010), they are not likely to be considered in most corporate planning processes.

Retrospective explanations

In the analyses above we see some simple ideas being reduced in detail and potentially applied to complex organisations. However, not all academic ideas are simple, and their complexity is often exceeded by the organisational complexity of the recipients. Many large organisations, for whom business continuity is a genuine priority, are, by any standards intensely complex. Browning and Shelter (1992) suggested the propensity for multiple realities to be perceived by various departments, units and potentially even countries. A view similarly alluded to, albeit retrospectively, by Reason (1990):

Each participant's view of the future would have been bounded by local concerns...there would have been a multitude of individual stories running on in parallel towards the expected attainment of various distinct and personal goals. (p. 215)

In planning terms, this suggests a need for the development of effective internal communications so as to maintain a common operational picture and to reduce any perceptive dissonance. Perhaps an echo of this can be seen in BS 11200 (2014) and the encouragement of situational awareness, even if the definition is ironically at odds with the academic concept of situational awareness offered by Endsley (1998).

Thus, adding to the plight of the planner, we note three elements at work: complexity, differing perceptions and a retrospective focus in the literature. Turner's model appears to have more utility as an explanatory tool than a predictive model and the predilection for academic hindsight, as introduced by Reason above. This might also explain the poor adoption of such theories by practitioners, and the distortions of

'hindsight bias', Fischhoff (1975), have been noted by several commentators. Most especially pertinent in the critique of the application of retrospective studies is the degree to which 'outcome knowledge' causes overestimation of what could have been known at the time. Reason (1990) compassionately observed that

Before judging too harshly the human failings that concatenate to cause a disaster, we need to make a clear distinction between the way the precursors appear now, given the knowledge of the unhappy outcome, and the way they seemed at the time. (p. 215)

Whilst it is welcome that Reason provides such a strong caveat against hindsight judgmentalism, his last comment is paradoxical. If one was to be able to gain an unvarnished view of what a manager thought before a disaster, then presumably he or she would state that everything was 'fine'. Thus, even a clear understanding of victims' antecedent beliefs could be of little value in predicting failures and disasters. The latter point explains why, despite presenting some risk management advice based on retrospective analysis, the findings could still be denied by the parties involved. Their perception would be that they are not in a risk-prone situation. Whilst the work of Turner (1978) and Borodzicz (2005) have recently been briefly and anonymously utilised in recent ISOs, very little of their work appears to have permeated into the risk management elements of the BCR process where one might expect to discover some more detailed analysis to identify those hidden, latent incubating defects. This illustrates the difficulty of the application of the literature in practice.

Complexity

Perrow (1999) suggested that "the solutions to most human performance problems are technical rather than psychological." (p. 233). His plausible logic was that it was easier to change the workplace and organisation rather than the minds of the individual workers. Perrow's further work in (1999) highlights the complexity of systems and stresses the dangers of 'tight coupling' and interdependent systems in which "...failures are inevitable" (p. 5). However, he shifted the 'blame' for errors from the operators to the context in which the operators work. This idea was combined with the potential organisational rigidity of responses, process and procedures that can inhibit

operator initiative when confronted with systems failure. Therefore, the work of Perrow and others is useful in identifying just how far activities described as 'contingency strategy' can be determined in advance and to what extent contingency 'policy' has to be made during the incident. Nevertheless, the notion of 'changing the workplace' to reduce poor responses in the event of risk management systems failing is a utopian dream for most planners.

However, Perrow (1967) had suggested that two aspects of an organisation's activity determine the extent to which responses can be pre-programmed. These are, firstly the number of 'exceptional cases', i.e. novel situations and unexpected events liable to occur during the work and, secondly, the nature of the search process required to tackle the problem (is the solution a skills, rules, or knowledge-based issue). If the resilience plan can be conceived of as a response to an ill-structured and chaotic situation where the 'rules and skills' of risk management have failed, then any solution will require innovation and imagination. Therefore, any contingency plan needs to be broad enough to encompass the novelty and knowledge-based processing required for a successful resolution. Whilst encouraging and challenging, this idea of generating a plan which encourages such innovation is perhaps beyond the remit of the planner, who, is never encouraged to adopt Kay's (2011) 'Oblique approach' to planning and who earlier in this chapter, was described by Elliott and Johnson (2010) as strategically challenged.

Perrow has thrown down an interesting gauntlet that subsequent studies have declined to pick up. In planning, it is difficult to be specific as to which element is likely to contribute more to the human performance problem of running a contingency plan. Certainly, there are several psychological hurdles that, unless overcome, render the most technologically proficient system useless. Generally speaking, based on the author's experience, a good team of bright individuals can make a poor plan work quite well, whereas a poorly led or motivated team of low calibre staff can frustrate the best laid plans irrespective of their technological advantages. However, if Perrow's work suggests that the BCR manager begins overhauling the organisation for error-prone areas, this might be deemed as impractical as searching for Turner's latent incubating defects.

Discussion

This discussion is not designed as a consideration of the academic works themselves, rather it is illustrative of the utility and applicability of the work. The overall impression is that some theories/models/concepts are too complex to implement. Similarly, some organisations themselves are too complex in which to implement ideas uniformly. Good academic work and definitions seldom survive translation into ISO standards. Retrospective explanatory analysis models are difficult to apply. In an increasingly complex, globalised and interconnected world, as alluded to by Boin et al. (2010) and Perrow (2011), increasing ‘tight coupling’ is not going to go away and ‘unknown unknowns’ remain usually exactly that. However, some theories even when reduced to the soundbite like ‘homeostasis’ are nevertheless useful in informing planning considerations.

However, the ‘fault’, if there is one, lies not wholly with the academic literature; it is shared by the industry being unable to apply them. The reason for this is that even given the abilities of the planners, proposed by Wong (2009) and outlined in Barclay Simpson (2017), and their status implied by the BCI (2017, b.), the planner simply lacks the skills to utilise them. This provisionally encourages a revision of the format in which academic literature is presented to the planners. This is to some extent an adaptation of Perrow’s ideas; in this case, it is probably easier to change the presentation of academic literature than it is to alter the academic inclinations or strategic limitations of planners.

Thus, despite Smith and Elliott’s (2006) superlative compilation of 23 learned articles. (The book covers every aspect of the topic and is of an impeccably high academic standard.) much of the content remains difficult to apply, perhaps due to their lack of practitioner considerations. As noted by Boin (2006), empirical research as opposed to theory building is scarce and theory building is difficult to apply in practice. Toft and Reynolds (1997) on the other hand offers the idea of learning from the errors of others. The concept sounds ideal and, as described by the authors, it is highly beneficial. However, it really deals with risk management before an incident rather than a response to it and the deployment of a BCR plan, thus its utility is limited at least in the planning process. Elliott and Johnson (2010) is excellent in terms of gaining an understanding of the issues planners face and thereby increasing awareness, it is

probably one of the most authoritative works available. It is highly beneficial in informing the planner's thinking as opposed to offering specific guidance to a planner. Turner's seminal work in (1978) is superlative as an analytical framework for explanations of why something occurred and where the problem lay, and mentally one can bear these lessons in mind. However, it is more useful to an inquiry than a planner. It is very difficult to apply Turner's work. Latent incubating defects or operational difficulties that are 'normalised' away would be notoriously difficult for anyone, let alone the planner, to identify. So, whilst all these works are of the highest possible academic credibility, they lack an ease of application by the planner and their translation into plans is thereby limited.

Chapter 5 Wider Academic literature germane to planning

Introduction

This chapter wrestles with a curious issue. There is relatively little specific planning literature offering advice to the planner, yet there is a wealth of literature that is not specific to BCR planning, but which can nevertheless inform its practice. The basis for its relevance is that people are responsible for planning and people operationalise those plans. They will do so under conditions of stress and uncertainty. This chapter considers the human factors that should be taken into account in BCR planning. It has several parallels with the type of literature that has influenced cockpit resources management, (CRM) Bennett (2006) who noted the possibly detrimental effects of automation on 'sheer pilot skills'. In the world of BCR responses, similar skills remain a vital ingredient. Therefore, the chapter considers: the specific planning literature; the perceptions of risk; cognition; creativity; behaviours of groups; the principles of planning, and team structures. It concludes by questioning why such a body of literature with such evident application has not had a stronger effect on planning considerations.

Plans and efficacy

It would be perverse if the study neglected academic comment on the BCR plan itself. Yet it remains a topic which attracts comparatively little attention and is strangely not even apparently a focus for ISOs and the trade press (Du Bruin, 2013). Nevertheless, it is valuable to investigate what materials can be identified as being useful in the construction of a BCR plan. Surprisingly, there are some shared academic views but despite their commonality the resultant plans are not so uniform, nor is any commentator willing to give any definitive quantitative judgment or endorsement of any plan style or format (Parnell, 2014). Perhaps this is the ultimate irony in the plight of the planner as the outcome of all their work seems the least regarded feature of the process. This is despite Elliott and Johnson (2010) reporting that the resultant plan and not the process remains the goal of most planners.

Academically, extensive scenario-based planning, which, despite being inherently criticised by Kay (2011) remains popular with some organisations and practitioners

(possibly because of audit pressure to have detailed plans), is generally not favoured. It is described as “folly for managerial leaders to spend a great deal of time conjuring up all the crises their firms potentially may face in the future” (Darling, 1994, p. 7). This perspective was endorsed by Boin and McConnell (2007):

Developing plans that work for the endless array of complex, chaotic and destructive scenarios that arise from interlocking and often mutually dependent infrastructures may be all but impossible.
(p. 53)

Supporting documentary sources reflect the academic perspective. BS 11200 states that “the CMP should be as concise as possible...The CMP should be focused on the provision of a generic response capability” (BS 11200, 2014, p. 10) (CMP crisis management plan).

This latter statement in BS 11200 (2014) recommends a generic plan and advocates the merits of brevity. This injunction is widely supported, “the plan should not be too rigid and specific, however, nor too long” (Regeester, 1987, p. 75) and “the larger the ‘plan’, the less likely it is that the plan will actually be used in an emergency” (Smith, 2013, p. 7). However, Heath’s caveat balances the debate to some extent: “For large organisations or those organisations undertaking work that entails complex risks, plans need to be specific and extensive” (Heath, 1998, p. 255), and he also importantly notes “do not over plan as this adds inflexibility”. (Heath, 1998, p. 261)

There appears to be a tension between the academic and ISO injunctions for brevity and the desires of auditors who, in the author’s experience, find longer, more scenario-based plans more acceptable. This might reflect their commercial drivers, where the usual audit of a plan takes two to three days or more for larger organisations. Such a duration of visit would be exploitative if a good plan was potentially too short and concise. This tension between academic advice and commercial audit requirements is not likely to be resolved easily. An example of this is a university plan, known to the author, only one section of which, exceeded a total of 200 pages. This perhaps reflects the advice to Universities offered by their own BCR body whose recommendation is 55 pages long in the first instance. (UCISA, undated)

However, might the auditors have a point: could brevity be to the detriment of efficacy, and, if so, how might efficacy be determined? Unlike the world of clinical trials, the assessment of resilience planning efficacy is stubbornly subjective and non-empirical. When confronted by the 'efficacy question' commentators start to refer to 'intuition' and heavily caveat their statements.

Although a positive link between crisis readiness and crisis management effectiveness is intuitive, it is well established that effective crisis management is a function of both preparation and improvisation. (Parnell, 2014, p. 4)

the existence and use of a formal plan do not by any means determine the effectiveness of the crisis response. (Boin, t'Hart, Stern, & Sundelius, 2005, p. 146)

Other commentators focus on what might be termed a 'results-based retrospective'. In this model "effective refers primarily to such factors as productivity, survival, and maintaining morale". (DuBrin, 2013, p. 3) Naturally this perspective lacks predictive validity and DuBrin protests that "theory and research about what constitutes effective crisis leadership characteristics are less abundant than opinion and advice about the same topic". (DuBrin, 2013, p. 3)

Evidently, without any control group, objective measurement of potential plan efficacy remains elusive, but perhaps it might be informative to consider the proficiency of the responders. Could efficacy be a reflection of the capabilities of the staff? If so, then what are the capabilities that are essential? Clearly good quality decision making is key to the resolution of a resilience issue. "The speed with which a crisis develops means that crisis decision-making is crucial in determining success in handling a crisis." (Elsubbaugh, Fildes, & Rose, 2004, p. 121). Some emphasis has undoubtedly shifted from planning to people and team training: "Rather than trying to think of everything a team should be ready for, it is more realistic to develop a team that is ready for everything." Bland (2013, p. 57). Lengnick-Hall, Beck & Lengnick-Hall (2011, p. 247) also found merit in this idea of creativity and innovation being at least as important as planning. They referred to US Navy SEAL training which enables their commandos to:

develop well-practiced responses that enable them to make sense out of their situation, develop creative solutions, and adapt in ways that accomplish their missions.

Heath, who is quite conservative in his advocacy of detailed planning, verges on being quite radical in his description of the zenith of resilience planning:

Probably the best level of planned readiness is to be able to discard references to the plan because the response, tasks and objectives are familiar to the users. (Heath, 1998, p. 262)

However, this 'grail' is almost unattainable outside of the 'blue light' or armed services who have the luxury of comparatively extensive training time.

The academic consensus on the plan that remains is that it should be as short as reasonably possible and be a mechanism by which decisions can be taken speedily. This does not seem to have translated well into the auditable standards and 'professional' advice. In a private communication to the author (dated 23-03-17) the resilience planner of a government department complained that an auditor (from one of the larger accounting practices) had demanded not only an incident response plan, but also a business continuity plan, a crisis management plan, a disaster recovery plan and, finally, a communications plan. Again, the planner is left with the plight of: academic endorsement of a short plan being at odds with audit requirements; the constraint of having to use the existing staff (who are seldom US Navy SEALs), and to have little time to rehearse a plan that must work for any potential scenario.

Psychological literature related to planning

Risk perceptions

We now add the personal, group and/or psychological issues to this catalogue of woes in the utility of academic theory informing resilience practice. Wagenaar & Groeneweg (1988), commenting on a review of shipping accidents, echo Reason's work and Perrow's consensus on complexity, but they add a human feature that of a simple 'belief' that the accident is impossible:

Accidents appear to be the result of highly complex coincidences which could rarely be foreseen by the people involved. The

unpredictability is caused by the large number of causes and by the spread of information over the participants...Accidents...occur because people do not believe that the accident that is about to occur is at all possible. (p. 42)

It is acknowledged by (Reason, 1997) that even a trained observer might not be able to identify the impending disaster which, to a lay commentator after the event, could have been easily identifiable. If BCR can be defined as a response to the known threats and risks, then something else is required to deal with events which are either unforecastable by even prior expert analysis or are catalysed by the antecedent beliefs of the organisation. If this is the case, then the need for effective resilience planning for unanticipated events is justified. This leads the literary trail of 'breadcrumbs in the wood' to risk perceptions and cognition.

Most academics agree that risk has multiple definitions and that it is inherently subjective, at least in its appreciation. Lopes (1987, p. 255) made a useful suggestion of how risk can be viewed as a decision made between knowledge and ignorance. Most of the decisions made in planning fall into the category of being neither fully quantifiable nor made in complete ignorance of the probabilities; they are often classic decisions made under uncertainty. However, the complexity of a business continuity/resilience team is compounded by being a 'group' of people. As Lopes (1987) also noted, their degrees of optimism, pessimism and risk appetite will vary. They will probably have trained together, and the group will be chaired by the most senior person, yet they have to deal with poor levels of information and make decisions in a high pressure, tense environment. Furthermore, they will all think differently and have differing perceptions of risk and, behaviourally, 'groups' are different to 'individuals'. The planner's plight is therefore to try to accommodate all these variables, in advance of an incident, in a plan. The following literature was selected to shed some light on what features should be taken into account in the planning process.

Notable is the work of Kahneman & Tversky (1979), which suggested that people are likely to be prone to the 'reflection effect', p 268 and be risk-seeking in the face of potential losses. It was also noted that in such cases of gambling, the subjective values attached to probabilities do not behave mathematically. This is vitally important, as

most BCR teams will be operating under the condition of potentially making a loss. It should be imperative to consider such biases in the planning process, especially in the risk assessment section of planning, to offset such a risk-taking propensity. However, it is difficult to believe that these theories are even known to most planners. In two decades of practice, no practitioner or client has ever asked the author for such concepts to be considered in the risk assessments or for an 'offset' for such potential predilections to be built into the plan.

Whereas Kahneman & Tversky's (1979), subjective expected utility theory and prospect theory, which was alluded to above, might be good indicators of preferences in the initial planning, what other psychological factors can be traced throughout the risky event? It would seem reasonable that if one is dealing with an incident or crisis in a corporate environment then motivation to succeed would be high. The 'personologist's' perspective of risk is illustrated by Lopes (1987). This was demonstrated by the 'ring toss games' in which motivation, probability and incentive were examined. The experiment studied subjects' optional distance from a target over which rings had to be thrown. The resultant deduction concerning the

compromises that must be made between certainty and incentive...or the motive to achieve success and the motive to avoid failure... (p. 259)

are again useful indicators and illustrative of a wide diversity of approaches to the same risk. However, it is difficult to extrapolate a child's game into the resilience planning situation where the situation is far more complex. Notwithstanding this, ignoring the perceived situation and motivation of response staff in the planning and response phase is arguably unwise.

Whilst useful in identifying preferences, the application of a raw theory to BCR planning should be cautioned against. Apart from any other limitations, such theories are almost exclusively based on gambles where the participant is powerless to influence outcomes. In practical terms this seems to differentiate gambles from risks, in the corporate environment a decision can be varied and amended in response to circumstances, made on the basis of feedback. Something that is amenable to change after the initial decision is a risk. Something where the odds are fixed or unknown is a

gamble. A horse race is a gamble in that no bets are taken after the race commences. A risk decision could be likened to amending bets during the race. Once again, the concept is fascinating but of limited applicability. Lopes's experiment is delightfully simple but the issues of motivation and reward being taken into account in planning are probably beyond the scope of the average BCR planner. Similarly, the niceties of distinctions between gambles and risks are not of great utility in the planning process.

Cognition

If the application of a plan is an ongoing process in a risk situation that can be altered by intervention, then the generation of thought in planning and dealing with an incident must be vital. If so, then at least some recognition of thinking (cognitive styles) should be considered in the drafting of an idealised BCR plan. Research by Saarinen (1973), which developed concepts proposed by Briggs (1971), indicated, through the medium of the drawing of maps, a preference to attach greater importance to objects which were either familiar or important to the participants of the study. One might suppose that, faced with a diverse set of risks to be managed in a crisis, the responders would preferentially deal with those with which they have some familiarity or intuitively attach importance to. Therefore, without awareness of this cognitive phenomenon, it is likely that such a plan would be more a reflection of the experiences of the planner not the responders. Potentially the planner will lack the balanced approach to accommodate the importance of issues as perceived by the responders. Therefore, a convincing case can be made for any plan to be 'sanity checked' by a non-planner to ensure that concentration on a specific issue is neither over nor under stated.

Wason (1968) and Wason & Johnson-Laird (1970) conducted studies showing that a negative sentence or statement took longer to interpret and was more likely to be misinterpreted than a positive one. They also noted that subjects tended to search for conforming instances of rules rather than, as might be logical in certain cases, to search out non-conformances. The relationship of these studies to BCR is difficult to discern as the results are more obviously linked to what most observers would call ability to 'spot a risk'. However, the studies do suggest that unless one searches out non-conformities then possibly some risk will have been misconstrued as not existing. If all the observer does is seek conformity to endorse notions of how something should be, then it is less likely that any flaw in the plan will be spotted. For example, in a

planning process it could be the case that information or 'intelligence' would be sought in support of the plan rather than by identifying challenges to it. The importance of this to the planning process is the constructive criticism or review by a third party to ensure that non-conformances are welcomed and not glossed over.

Hudson (1966) similarly differentiated two cognitive styles. Convergent thinking, a logical seeking of a 'right' answer, seemed most common in subjects who were 'science' oriented at school. Divergent thinking, a more creative, innovative, unconventional style, was associated with those good at 'arts' subjects. The possible relationship to BCR planning can be seen in the preference for objective, quantitative analysis by convergent thinkers and a predilection to favour qualitative information by divergent thinkers. The additional importance of a divergent approach lies in the potential flexibility of response teams to come up with innovative and powerful solutions to unexpected situations. This can be contrasted with a more convergent approach that would favour a strict rehearsal of identifiable risk and crisis scenarios. It would therefore appear that some balance of thinking styles should be the best foundation on which to build an effective contingency plan. This would be a plan which utilises the best strengths of the available responders and does not exclude unlikely scenarios and solutions. Yet again, in 22 years of practice, the thinking style of any team has never been remarked upon by any client nor, as far as I am aware, has it informed any plan that I have had to review.

Creativity

One of the limitations of any BCR plan is budgetary. 'Blue sky' options are unaffordable to most companies. How then can the BCR planner get the best possible response without overrunning prudent costs? This is seldom addressed in any specific literature but the issue can be seen to have been considered obliquely. A study by Glucksberg (1962) revealed the disinclination of subjects to utilise a logistic resource (in this case the tray of a box of matches) for a purpose other than that for which it was designed. In similar fashion, unless a company's resources are viewed with recognition of their obvious alternative functions, extra costs might be incurred, or opportunities lost in the maximisation of effectiveness of a contingency plan. In short, an effective BCR plan avoids 'functional fixedness'. These ideas are also closely allied to the Gestalt 'Einstellung' limitations to thinking where thinking about options at the very boundaries

of a problem, seems to become increasingly limited, a point echoed by Miller (1956). Potentially it requires the solutions offered by de Bono (1977) of lateral thinking. The idea of brain-storming being a solution that maximises the synergy of a work group is now well established in business. Certainly, there seems little doubt that it should be used as a planning tool in the BCR plan. However, it is the author's experience that brainstorming sessions are more appropriate for identifying problems than proposing solutions. The proposition of solutions seems to require a greater degree of thought and consideration than brainstorming can offer a point implied by Pauchant and Douville (1992).

Ghiselin (1952) proposed three stages of creativity in response to a problem. The process goes from familiarisation with the topic, which could take considerable time, to incubation, an unconscious process of deliberation, followed by activity when the results of the unconscious cogitations are captured. Whilst the compilation of a corporate contingency plan is arguably less dramatic than composing music, poetry or mathematical formulae, at least some of the problems posed require a comparable thought process. Given limited resources, time and complex problems, such as terrorism or an active shooter, then such a creative approach might be warranted more often than is allowed for in the usual corporate desire for plans to be constructed to auditable standards and implemented as soon as possible. A personal communication to the author 110518 by the head of continuity for a German bank in London endorsed the view that the process is 'little more than a tick box exercise'. The evident question of 'Is the planning recognised as a creative process?' remains almost entirely disregarded by standards and, naturally of course, and possibly most critically, ISO auditors. It might be just too problematic to have a standard for BCR creativity.

Group/Team Behaviours

Almost all resilience responses are conducted by groups of people and there is a lot of potentially important academic work on this matter. This apparent conformity and inclination to unquestioning standardisation, alluded to above, is addressed in large measure by Janis. His vehicle for debate was an analysis of flawed US foreign policy decisions. In the preface to his second edition, Janis (1982) describes the thoughts that led to his writing the book.

I began to wonder whether some kind of psychological contagion, similar to social conformity phenomena observed in studies of small groups had interfered with their mental alertness. (p. vii)

The similarities between the decision-making groups in Janis's book and the corporate groups (risk policy units and crisis management teams) are evident. They both determine the survivability of the unit concerned and have similar hierarchical characteristics. Both groups also deal with decisions made under conditions of uncertainty. It therefore seems reasonable and worthwhile to include the dimension of Groupthink in the analysis of corporate contingency planning procedures.

The danger of Groupthink in BCR responses is far greater than Groupthink concerning policy decisions. Whereas policy decisions at least can be reviewed, the short time frames in the implementation of BCR plans preclude the luxury of review; they have to be right first time. If the 'Plan' fails to achieve its aim, the company may not survive the incident. Groupthink also has increased pressures due to its seriousness and as Janis (1982) mentions

...the advantages of having decisions made by groups are often lost because of psychological pressures that arise when members work closely together, share the same values and above all face a crisis situation in which everyone is subjected to stresses that generate a strong need for affiliation. In these circumstances, as conformity pressures begin to dominate, groupthink and the attendant deterioration of decision making set in. (p. 12)

BCR responses based on a plan are normally made by a group of people. Whilst one person may apparently be in overall charge of the group the decision is technically a group decision.

Janis's précis (p. 175) of the seven defects in decision making which contribute to failures in adequate problem solving is as follows, and it amply illustrates the topic's relevance to contingency issues:

1. Incomplete survey of alternatives.
2. Incomplete survey of objectives.
3. Failure to examine risks of preferred choice.
4. Failure to reappraise initially rejected alternatives.
5. Poor information search.
6. Selective bias in processing information at hand.
7. Failure to work out contingency plans.

And most critically he notes

...members consider loyalty to the group the highest form of morality. That loyalty requires each member to avoid raising controversial issues, questioning weak arguments, or calling a halt to soft headed thinking. (p. 11)

Who, if anyone, should challenge groupthink in the context of resilience planning in the corporate environment? Few managers have either the moral courage or the confidence or the strategic vision, as noted by (Elliott and Johnson, 2010) to do this. The reasons for this inability to play devil's advocate and break the chain of groupthink is deeply ingrained in the training of many such managers.

Several psychological phenomena, cognitive processes and the propensities of groups are relatively well publicised and known by many practitioners; however, the issues have not translated at all well into mainstream advice and practice. In contrast, whilst Janis's work might be appreciated by practitioners, it might not be a 'job prospect enhancing act' to bring it to the attention of the very board members and superiors who might be prone to Groupthink

Planning principles

Principles

If academic theories remain difficult to apply to the practice of BCR, it still might be the case that academic work can, nonetheless, inform the development of underpinning resilience planning principles and doctrines. A general overview was compiled by Pauchant & Douville (1992, p. 46), who summarized the works of 24 authors writing on crisis management and related issues. Although their study focused on crisis

management it remains a useful summary of the literature of the field up to 1991. Notably it tends to highlight, albeit inadvertently, the inapplicability of theory to practice.

In summary of the work of Pauchant and Douville, they observed that authors concentrated on the construction of theories (an issue raised later by Smith and Elliott (2006)), and on three other areas of interest:

- technological issues,
- subjective/cultural issues,
- and social criticism.

More minor topics investigated included issues of

- structure,
- strategy,
- communication
- and management of diverse stakeholders.

Searches by Pauchant and Douville showed that 80% of the literature on crisis management had been published post-1985 thus illustrating the infancy of this field of research (a point noted by Toft five years later). Of the articles analysed, the dominant theme of 'theory building' was also seen to endorse the juvenile stage of the field of research. The authors proposed a definition of crisis that they felt would be acceptable to most commentators:

crises are disruptive situations affecting an organisation or a given system as a whole and challenging previously held basic assumptions; they often require urgent and novel decisions and actions, leading potentially to a later restructuring of both the affected system and the basic assumptions made by the system's members. (p. 46)

They found that their research endorsed that of others, which indicated a fragmentation of the field and a lack of an overall paradigm. However, eight specific topics of research could be identified; their findings are summarised below. All the factors identified are relevant to the construction of BCR plans.

1. The process of a crisis evolves through different stages and requires proactive or reactive measures depending on the stage of the crisis.

2. Crises and crisis management efforts can be grouped into families and thus give a rationale to managers on which to base strategy.
3. Crises are the result of complex, systemic interrelationships among many different variables whose analysis requires a broad perspective rather than a detailed analysis of a few variables.
4. The importance of the interrelationship between human and technological systems.
5. Given the stages of a crisis and the system's relationships, proactive preventative methods and management actions, including the identification of early warning systems, have been proposed. These include simulation, training, risk reduction, assessment and issue management.
6. The proposition of factors likely to limit the effects of a crisis or accelerate recovery of the system.
7. The identification of characteristics of crisis-prone and crisis-resilient companies and the need to audit companies to identify the degree of crisis vulnerability.
8. The identification of positive spin-offs of crises in the generation of positive changes.

It seems, therefore, that one of the more useful outputs of this work could be the establishment of 'principles' on which the contingency plan should be based. This notion might be 'seen through a glass darkly' in the authorship of strategy and scope documents in the resilience process, but it will be revisited in the concluding chapter.

Team structures and corporate culture

If the doctrines and principles are difficult to discern, then at least the applicability of academic work on planning within the domain of the corporate culture might be easier to assimilate into the BCR planning process. Inherent in any plan is the requirement for crisis management teams to take decisions within the context of a company's existing hierarchy and culture. If cultural sensitivity is included in the plan, this could improve the ability of the team to take better quality decisions, thus literature on this topic is worth including in this review.

Morgan (1986) discusses various types of “species of organisations” (p. 57). He suggests that an “adhocracy”, a term coined by Warren Bennis, is often formed for specific tasks. It is usually comprised of project teams for a specific task and is disbanded after its achievement. Adhocracies often use a matrix structure of organisation and, if properly utilised, this can encourage “flexible, innovative and adaptive behaviours”. This ideal is not too far removed from Ghiselin’s (1952) commentary on the need for creativity mentioned earlier. Whilst Morgan rather concentrates on their employment in development projects, it seems apparent that their characteristics are akin to those needed in BCR teams. But, as a caveat, Morgan notes that such units have two major drawbacks, namely: the staff can tend to identify more with their original department than the newly formed team and this divided loyalty can erode the effectiveness of their contribution; and secondly, such units can become dominated by meetings that become time consuming.

In the context of BCR planning, both drawbacks are likely to be damaging to effective and speedy decision making, but there does seem to be an appeal for ‘creativity in crisis’ which might be seen to outweigh the disadvantages of the adhocracy.

At the macro level, Peters and Waterman (1986, pp. 89-327) cited in Morgan (1986, p. 61) proposed eight basic practices of successfully managed companies. Paraphrased from the American into a more English-friendly idiom they are as follows:

1. A bias for action.
2. Closeness to the customer (rapid stakeholder communications).
3. Autonomy and entrepreneurship.
4. Productivity through people.
5. Hands-on, value-driven.
6. Concentration on core business (critical activities identified in the business impact analysis).
7. Simple form, lean staff (small BCR teams with high levels of autonomy).
8. Effective command and control whilst retaining empowerment (the Home Office concept of subsidiarity).

Almost all of these can be identified as the requirements of a successful BCR management unit. The question remains as to how these features can be built into the

unit in the formation phases of contingency planning. If, indeed, there is any doctrine that informs planning without it being acknowledged or apparent, it is these comments. They illustrate the possible translation of the ideas into the planning principles, or what might in the final chapter be termed 'doctrine'.

Fundamental to the efficacy of the crisis management effort is effective decision making. Morgan (1986) suggests that from Herbert Simon's theories of human rationality it follows that an organisation can be understood as an institutionalised brain that "fragments, routinizes and bounds the decision-making process in order to make it more manageable". Morgan cites Galbraith's research on the relationship between uncertainty, information processing and organisational design. Morgan comments that:

Uncertain tasks require that greater amounts of information be processed between decision makers during task performance. The greater the uncertainty, the more difficult it is to program and routinize activity by preplanning a response. (pp. 81-84)

The more normal corporate responses to this problem are to increase both slack resources and self-contained tasks and, concurrently, to increase information processing capacities. This latter task is not merely an improvement in the IT capability, but rather the development of lateral communication and matrix forms of management. Therefore, it seems apparent that the design of any contingency plan to operate in conditions of uncertainty has to facilitate greater-than-usual information flows between decision makers.

Discussion

Despite a considerable body of academic literature germane to BCR planning, its application remains hampered by the position and status of the planner within the organisation. The Planner described by the Barclay Simpson (2017) summary, Wong (2009) and the BCI (2017, b.) *Horizon Scan* is simply incapable of applying most of the ideas in this literature. As long as the planner lacks strategic capacity and as importantly strategic status such a body of literature is unlikely to ever be taken into account in the planning process in the majority of cases. Whilst there are no standards of entry to BCR planning and the BCI maintains such relatively low standards of entry

to the institute, then it is likely that the status of the practitioner will be perpetuated and whatever academic work is conducted will languish in some obscurity. The majority of current planners do not have easy board level access and to imagine that they can undertake detailed analysis of behaviours, cognition, and risk perceptions that could influence their plans is simply naïve. This situation therefore demands that the academic literature be rephrased and made more accessible.

The review of this literature which potentially informs BCR practice is not particularly encouraging in evoking any conclusion other than that BCR is only marginally informed by dilute literature. Economic pressures driven by regulation and audit practice appear far more influential on a planner's mind than the differentiation between risk and uncertainty, and the brittle egos of many executive boards may perpetuate Janis's Groupthink. What survives to inform practice are a few phrases, a homeopathic quintessence of wisdom, which is often misquoted and misapplied. Cognition, perception and creativity are mentioned obliquely, sometimes amongst my peers, but such topics go wholly unremarked in the new proliferation of standards which were intended to professionalise BCR practice.

To the author's knowledge, almost none of my client contacts, who are generally senior managers in FTSE top 500 companies, have read any of the works mentioned above. In informal conversation, one client had heard of 'groupthink' but could not recall what it was until prompted. Informally, their consistent explanation is one of time pressure and not knowing of the articles' existence. This is a swingeing critique of the educative process inherent in the BCI's professional development programme, as many of them are members or fellows of the BCI. In a slightly 'Rumsfeldian' way, they do not have time to discover their 'unknown unknowns'. Their plea is to have the works précised and published in a 'chunk' that would be readable on a short train journey, and, preferably, the academic principle contained in it would be related to a case study.

Perhaps the translation of purely academic articles into mainstream readership is best illustrated by a snapshot sample taken from the Journal of Business Continuity and Emergency Planning Vol 9 No 1 Autumn/Fall 2015, Henry Stewart Publications, London. This is an interesting publication with largely practitioner authors and an editorial panel of practitioners only some of whom are academically qualified. This

particular issue published 10 essays on diverse set of topics. Most were referenced some in considerable detail. However, of the 157 references only twenty-one might be considered to be academic works, (interestingly seven of the twenty-one academic references were in one article authored by a Cranfield University masters graduate). The remaining references were to authoritative but non-academic sources such as 'ready.gov' or FEMA articles, trade reports and articles or census surveys. Notwithstanding the ratio of academic sources (13%) it is encouraging that such work is being authored and one can sense the desire for authorities to be evident and consequently professionalise the articles, yet it still illustrates the propensity of the practitioners to use non-academic sources and it is reflective of what genuinely influences planners.

All the works above are genuinely difficult to apply to the planning process. Nevertheless, they should be read by the planner whose education and insight would be enhanced by the experience. So, it is with some trepidation that the chapter ends with a slightly forlorn introduction to the next chapter, which debates the influence, quality and utility of the 'best practice' and the rash of these recent standards. Perhaps it is simply the case that BCR lacks the academic power to be a paradigm, a sentiment alluded to by Pauchant and Douville (1992) and Alexander (2013).

Chapter 6 BCR best practice guidance

Introduction

The format of this chapter is based on a critique of the best practice guidelines, the HM Government advice, the BCI materials and a number of non-academic text books. The critique is preceded with some caveats concerning the criteria of analysis which, whilst retaining those alluded to earlier, sets a 'weaker' standard for non-academic texts. The chapter also utilises the responders' opinions in Elliott and Johnson (2010), Kay (2011), and the work of Smith and Elliott (2006) as means whereby practitioner opinion can be contrasted with the literature presented. Also noted is the frequent semantic dissonance to which less academic works are less prone. A caveat is also offered that most of the BCI materials and the ISO standards are commercial and are not value-free having often been heavily sponsored by interested third parties.

'Repetition' is not an authority

If academic thought struggles to inform BCR practice, then, given the previously referenced boom in BCR, (Burnett, 1998), the discipline should logically be informed by more practice-orientated literature. If it is thus informed, then it is vital, if BCR is a 'profession', that the literature is of a correspondingly high standard, albeit perhaps not aspiring to peer review and detailed academic referencing. However, this high standard would not accommodate the simple repetition of ideas and circular referencing; such a 'fausse autorité' is caveated against by both fictional literature and academic comment. The words of a commercial author, le Carré came to mind:

By repetition, each lie becomes an irreversible fact upon which
other lies are constructed.

John le Carré, *Absolute Friends*, 2003, Hodder and Stoughton

A more academic parallel of the same sentiment is found in Taleb's (2010) book:

...successions of anecdotes selected to fit a story do not
constitute evidence. (p. xxxii)

...a series of corroborative facts is not necessarily evidence."
(p. 56)

As the focus changes from the tightly disciplined academic works to the less regimented 'grey literature,' one might also expect an element of bias and commercial interest to emerge. However, one should expect articles not to be overtly 'advertorial' in nature. One might expect some 'filtered' academic work to be evident in 'good practice' advice and standards. Naturally, the idea that 'greater claims require a heavier burden of proof' should be addressed perhaps not by references but at least by detailed case study.

At risk of prejudicing the reader, the 'standards' and ostensibly titled 'best practice' are mired in semantic debate and confusion which makes even the most convoluted of academic issues seem lucid. As a preamble to the chapter, a brief overview of the evident issue between academic definitions and lay interpretation is offered below.

Academic definitions; their translation into non-academic texts

Most of the self-help manuals and standards reference the same fundamental terms or themes: risk, uncertainty, strategic, tactical and sometimes operational levels of a response. In many cases the terms seem to be used incautiously ('strategy' in ISO terms being synonymous with plans and procedures as noted in ISO 22301 (2012)) and are unrelated to mainstream academic definitions. The most concise definitions of strategy are offered by Ansoff (1987) who wrote on corporate strategy. He recalls the military definition of the word as being "a broad rather vaguely defined, grand concept... for application of large scale forces..." (p. 114). He correctly distinguishes tactics as a "specific scheme for employment of allocated resources." Very usefully he also further distinguishes policy as being distinct from strategy: "Policy is a contingent decision, whereas strategy is a rule for making decisions". As the words 'risk and uncertainty' are also often used incautiously, his definitions of them can be useful: '*risk*' - alternatives are all known and so are their probabilities and '*uncertainty*' - alternatives are known but not the probabilities.

Whilst his definitions are based on mathematical concepts and models, their precision is useful to the contingency planner as it better defines activities. However, there appears to be a predilection for the BSI, and by implication the ISO, to redefine definitions. For example, BS 65000 (2014) refers to "top management" (p. 2), (presumably the strategic group), as the "people who direct and control an

organisation at the highest level”, but who, in an immediate note to the definition, execute the “direction provided by the governing body” (p. 2), thereby making them de facto, not the ‘highest level’. Similarly, ‘risk’ is defined as the “effect of uncertainty on objectives”. This definition immediately mixes two distinct and critical academically-defined words. Then, their definition uses ten lines of text in five notes to explain the definition of the definition. Paradoxically, the meaning becomes increasingly obscure, multiple meaning is encouraged and the original simplicity lost. Quite clearly terminology (or definitions) do not translate easily from academic work to standards and guidance. With some regret, this mangling of words sets the tone of the chapter.

The context for the analysis

The documents in this chapter are highly influential on planners. Their claims use hyperbolic superlatives such as ‘best’ or ‘definitive’, and in some cases they add the term ‘white paper’ to gain governmental connotations of authority. Their publications are not peer-reviewed and go largely uncriticised, yet the BCI enjoys a privileged position as the representative association for the industry. Juvenal coined the phrase, ‘Quis custodiet ipsos custodes?’ (By whom are the guards themselves guarded? Satire VI, lines 347–348). This question can be added to the criteria of analysis and asked of the authors of the standards and best practice. Whilst still retaining the criteria of analyses of Minger, Damer, Stewart, Saunders and Lord Steyn, some additional forms of analysis or comparison seem appropriate for works that are influential but not academic. The standards and best practice are commercial documents and they make considerable claims as to their efficacy. Consequently, it would seem reasonable that the more any standard or ISO ‘promises’ then the more proof of such claims might be expected. The slightly strange paradox in trying to comment academically on the standard of a standard, especially standards that do not reference any academic sources, is problematic. The issue requires the identification of some credible work that has the breadth and depth to offer an academically informed comparative critique against which to contrast the claims, methods and contents of the standards and best practice.

Albeit that the Elliott and Johnson (2010) report was published a few years before the bulk of the BS and ISO works (hereinafter ‘standards’) were published, PAS 56 had already gained considerable publicity, adherents and devotees. The report’s

persuasive power is based on the interpreted or stated opinions of 83 BCI members. It is referenced to considerable numbers and varieties of academic sources and it remains one of the most credible studies published recently. The report was, therefore, selected and utilised as a neutral contrast, context, foil or comparative for the contents of the standards and much of the rest of the 'Grey' material considered. In other words, the report 'guards the guards'. These criteria are applied in addition to those criteria noted in the methodology chapter. Outlined below are some observations from the report that have shaped the following critique.

The ISO 2230 is an auditable standard; however, it has often become synonymous with best practice. Elliott and Johnson (2010, p. 31) cites at least four respondents who rejoiced in the publication of standards (in this case PAS 56, the precursor of BS 25999 and ISO 22301), which offered 'best practice' 'rule book' status and obvious pragmatic help.

'Respondent 17' Elliott and Johnson (2010, p. 31) complained that "Business Continuity...suffers from being deliberately overcomplicated" by vested commercial interests to the detriment of lay understanding and consequent disdain and disempowerment. Therefore, one could presume that the standards should be as simple as practically possible. In many respects, the over complication manifests itself as 'goal displacement' and a multitude of definitions proliferate; sadly (see annex 2 to Elliott and Johnson (2010, pp. 94-95)) these semantic debates often substitute for serious analysis. Few commentators, aside from Borodzicz (2005), admit the possibility of a spectrum of terms from incident to disaster where, by analogy, the difference between, say, blue and turquoise or red and maroon is left to the observer who can then get on with the business of dealing with the issues rather than attempting futile categorisation. One might therefore hope that the standards were not too prescriptive.

Elliott and Smith (2006), writing in the context of stadia and crowd safety, noted that the adoption and application of standards limited responses to compliance with the standard, which one could term the 'lowest common denominator', rather than seeking imaginative solutions to exceed the demands of the standard. The capacity of burgeoning and of inter-related standards to stagnate thought and innovation is

encapsulated in the modern term ‘McDonaldisation’, coined by Ritzer (2008). Ideally, one should see allowances made to foster individualism and initiative within the auditable framework that standards offer the practitioner.

In summary, if (in addition to the existing criteria) the guidance, standard or best practice is over complicated, semantically confusing or if a standard is conducive to complacency, then some criticism is warranted.

Best Practice Guidelines

The BCI is not shy of publishing. It publishes frequent documents of varying relevance for example: Business Continuity Institute, (2012, a.) *BCM The Time is Now*, (2012, b.) *Engaging the Board*, (2012, c.) *Measuring BCM*, (2012, d.) *Safeguarding Reputation*, (2013) *Case study Yvonne Martin Beauty Clinic*.

Fortunately, ‘in response to BCI membership requests’, the growing mass of BC ‘good practice’ and associated documents were conveniently catalogued according to two criteria, business sectors (ranging from Banking to Agriculture), and by typology. The BCM Legislations, Regulations, Standards and Good Practice (2014), (BCM LRSGP, 2014, p. ii) very usefully distinguishes typologies as:

- Legislation, which was defined as ‘legally enforceable’.
- Regulation, which could ‘*reasonably be construed as having implications on an organisation’s BCM provisions*’.
- Standards from ‘*accredited national standards bodies*’.
- Good Practice published by various ‘*authoritative bodies*’ which would be ‘*well used and accepted as credible advice by BCM professionals*’.

The list is caveated in that some entries are ‘indirectly’ related to BCM. Nevertheless, some 84 pages of references are listed (including the possibly little appreciated *Kazakhstan Government Regulation of 30 Sept 2005, Instruction #359*). Two important issues arise from this detailed, if tedious, cataloguing. The first is the compelling evidence for the geometric growth of BC documentation, if not ‘literature’. The second is the implication that the legislation, regulation, standards and good practice are significant motivators and sources of reference for those tasked with the planning process. This, therefore, justifies an inclusion in the literature analysis of the Standards

and Good/Best Practice that is available and relevant. Notably, the legislation in the UK is not included as it does not apply to all business sectors. Similarly, regulation is also excluded as normally it pertains to specific sectors and varies in scope, detail, intent and sanction. Therefore, only standards and good practice documentation are analysed as, logically, these documents will also inform those bound by legislation and regulation as well as those that are not.

Therefore, following the BCI's own proposition (BCM LRSGP, 2014) that 'Good practice' will be 'well used by professionals', a number of documents books and standards are now considered.

The 'Business Continuity for Dummies' guide (BCFD)

The, perhaps inadvertently patronisingly titled, Business Continuity for Dummies (BCFD), authored by Sterling, Duddridge, Elliott, Conway and Payne (2012), can be argued to be 'authoritative' best practice by the BCI's own definition in BCM LRSGP (2014) in so far as it was authored in partnership with the Emergency Planning Society, the BCI itself and the Cabinet Office. Its creation was catalysed by the UK Government wishing to "give guidance to SMEs following the Strategic Defence and Security review" (p. 283).

The advice offered is basic and pragmatic, for example it suggests:

If following an exercise, you've identified changes to make or new procedures to introduce, make doing so a priority task...You may want to record amendments to your plans as version changes and give the date this happened. (p. 187)

This is not to imply that any of the advice is wrong or foolish, rather that it is authored at, as the book's title implies, the most basic level. This is further illustrated by a plan template on (p. 133) for staff evacuation, which one might argue is a fire evacuation plan. In terms of identifying any academic work which has filtered into or influenced the book, this is not apparent. The references, such as they are, are on page 2 and they refer only to the BCI Good Practice Guidelines, (BCI GPG (2013), BS 25999, PAS 200:2011 (Crisis Management) and the Cabinet Office's National Risk Register. The authors, sponsors and members of the reviewing panel tend to be consultants,

practitioners and the former technical director of the BCI, and no academic input or peer review from any source or university is mentioned.

BCI Good Practice Guidelines (BCI GPG)

If Stirling et al. (2012) is informed by the BCI *Good Practice Guidelines* (BCI GPG, 2013), then this authoritative good/best practice document should be considered next. It offers some 115 pages of practical advice, the format and content of which naturally bears some comparison with the Dummies Guide albeit its style is more business-like. The correlation of advice is unsurprising, but the similarities are perhaps little more than rephrasing. An example is; Stirling et al., (2012, p. 187) “now make sure your next exercise embraces all the changes you’ve made...you may want to run a new quick test on how well the new requirements work”. Contrasted with the BCI GPG (2013, p. 99) “Consideration should be given to re running an exercise after corrective actions have been put in place, where significant issues have been identified.” This similarity does not imply covert or accidental plagiarism, as Pitt and Goyal (2004) astutely observed, “Most of the models include the following [same] phases of a BCP.” (p. 88)

The BCI GPG (2013) is not academically referenced nor are there any obvious or oblique academic allusions. The only external reference is to ISO 22301, (2012) terminology which is seen to be “relevant throughout these Good Practice Guidelines” BCI GPG (2013:5). In turn, ISO 22301 is described as

principles and terminology generally accepted by the BCI...they should be seen as complementary (to the GPG) and addressing varying audiences with different purposes and objectives. (p.11)

However, and very importantly, the debate concerning BCR’s relationship to the BCI GPG (2013, p. 8) suggests that “BC is one of the key disciplines required in any organisation who aims to be a resilient organisation”. Crisis management is referred to as “forming an integral part of building capability to respond to and recover from situations which are wider than operational disruption”.

Returning to Juvenal’s caveat and not wishing to personalise criticism, the documents reviewed above have evident similarities and all were heavily influenced by the BCI

and, specifically, by the then technical director of the BCI. He was the editor of two of the documents and a sponsor of the other. It is very difficult, therefore, to avoid the conclusion that their contents are supportive of each other and no external critique (that might echo peer review) has been entertained.

International and British Standards

Without doubt, as they are cited by the BCI and used as an authority by the BCI GPG (2013), the British Standards and the International Standards (ISOs) have had a major impact on the practice of business continuity/resilience. The chapter now reviews those standards most allied to and applied to the professional practice of BCR.

BC ISO standards

The two complementary or integrated disciplines referred to in the GPG, crisis management and BC resilience, inform and relate to ISO 22301 (2012), and a consideration of this standard and related guidance is essential.

ISO 22301 (2012) outlines the auditable requirements for a business continuity programme but, in some respects, paints itself neatly into the corner of being a resilience standard. It refers to dealing with “disruptive incidents” as being the focus of the plan (p. v) and makes reference to business continuity creating a more “resilient society”. This notion of resilience is echoed on (p. 2, para 3.4) where business continuity is defined as “a framework for building organisational resilience”. On (p. 4, para 3.19) the document further defines an incident as being “a situation that might be or could lead to, a disruption, loss, emergency or crisis”. One cannot avoid noting the circularity of definitions and the inevitable links to other terms (emergency/crisis) which might obscure, rather than clarify, definitions. Finally, on (p. 1), it makes the impressive claim that meeting the requirements of the system can “protect against, reduce the likelihood of occurrence, prepare for, respond to and recover from disruptive incidents”.

The term ‘strategy’ (p. 16) is used somewhat uneasily to describe the selection of what Ansoff (1987) would term tactics. These strategies apparently deal with various issues arising and (p. 17) details “procedures” as being the item more commonly associated

with plans which is technically listed as a separate Para 8.4.4 (p. 18) where the words 'plans' and 'procedures' are then used interchangeably.

The language used is confusing and Para 8.5 (p. 19) claims that exercising and testing can "minimise the risk of disruption to operations", though just how this "minimises risk" is not addressed. The bibliography references complementary standards and other national standards. No academic source is referenced to validate any of the considerable claims made. The order of paragraphs is perplexingly eclectic. Para 8.4.2 'Incident Response Structure' comes after the 'procedures or plans' that they, the product of the structures paragraph, would be implementing.

Given the lack of detailed explanation, in what is admittedly the auditable standard, it is unsurprising that ISO 22301, the 'Requirements', is accompanied by ISO 22313, (2012) '*Guidance*' on the Requirements. This welcome guidance disappoints immediately. In the 'Introduction' (p. v), it ironically states that "It is not the intention.... to provide general guidance on all aspects of business continuity". It begs the question, just what 'aspects' of business continuity have been omitted? The ISO 22313 maintains a similarly imprecise tone to ISO 22301. On (p. vii) business continuity is perhaps correctly, or at least consistently, defined as focused on dealing with "disruptive incidents". Later in the same paragraph, however, the astonishing and wholly unsubstantiated (if not 'plain wrong') doctrinal statement is made.

Any incident, large or small, natural, accidental or deliberate has the potential to cause major disruption to the organisation's operations and its ability to deliver products and services.

This notion is diametrically contradictory to the risk assessment section at Para 8.2.3 (p. 20). Here it is claimed that the 'risk assessment' can analyse risk "in terms of consequence and likelihood". Inherently this suggests risks are bounded and that not all risks have the same potential for major disruption. It then references ISO 31000 (2009) – which, of course, one can then purchase – to do the risk assessment correctly. In common with all the other documents so far commented upon, no academic references are available in the bibliography, which only references other standards. The documents begin to appear to be a self-fulfilling prophecy. The

references are stubbornly circular, a feature that Taleb (2010) would doubtless condemn.

Complementary Crisis Management guidance

BS 11200 (2014, p. 1) offers guidance on Crisis Management and, claims it “is one aspect of a more resilient organisation”. It claims it has close links to the standards concerning business continuity, resilience information security and exercising and testing. BS 11200 distinguishes a crisis from the ‘disruptive incident’ that business continuity deals with (see ISO 22301 above) by defining a crisis as “an abnormal and unstable situation that threatens the organisation’s strategic objectives, reputation or viability”. The difference between Incident and Crisis is expanded upon at some length in a table, (p. 4). Despite some curious linguistic tension in that ‘Incidents’ are “generally foreseeable” but can be “no notice”, the comparative table evidently reflects several of the writings of Borodzicz, especially on the nature of crises and their unpredictability. However, no reference is available to support this similarity, notwithstanding the fact that Borodzicz is known to have been on the drafting team. Similarly, para 3.2.c (p. 5) on the origins of crisis seems to be an homage to the work of Turner and his Six Stage model, with the key words ‘latent’, ‘defect’ and ‘incubating’ being mentioned and elaborated upon but none of the phrases being referenced nor attributed to Turner. This referencing neglect could be a rather serious oversight in any other type of work.

Although the guidance offers a great deal of common-sense, pragmatic advice, some of the ‘Principles of crisis management’ (p. 6) seem somewhat self-evident, such as advice to “achieve control as soon as possible”. It is often more akin to the Dummies Guide.

The guidance also introduces some military or quasi-military/aviation industry terms and applies them to crisis management in an awkward fashion. Notable amongst these is the paragraph on situational awareness (p. 11). The application of what was essentially an aviation/military concept to crisis management has the potential to be uneasy or inelegant, and indeed it is. Endsley (1998) defined situational awareness as the perception of the environment with reference to the near future. Dominguez, Vidulich, Vogel, and McMillan (1994) added that it had the qualities of integrating

information from the environment to create a mental picture of the current situation and thereby anticipating future developments. In aviation terms the accepted definition is taken from the Manual of Evidence Based Training, first edition (2013) published by the International Civil Aviation Organization. It focuses on the comprehension of available information and anticipation gained thereby. This contrasts strongly with the terms ‘uncertainty and containment’ in BS 11200 noted subsequently;

Perceive and comprehend all of the relevant information available and anticipate what could happen that may affect the operation.

EBT ICAO Manual Doc 9995 First Edition (2013)

<https://www.osmaviationacademy.com/blog/core-competencies-for-pilots-situational-awareness>

Without any apparent endorsement, BS11200 adds to these established definitions that situational awareness deals with “the degree of uncertainty, the degree of containment,” (p. 11) and declines to further define or reference these terms.

In section 5 (p. 15), “crisis management” is differentiated from ‘normal business’, albeit the list of differences does not appear that different from the high-pressure activities in normal business. As to leadership (p. 17), it observes that “leadership in a crisis is not a special skill set” and then, in the same sentence, states that “it might not be within the skill set of all the organisation’s senior leaders, even those that are highly successful...”. This appears to be somewhat contradictory and arguably insulting.

In most other respects, such as “participants” (p. 13), BS 11200 (2014) suggests similarities with the likely staff to be involved with business continuity, albeit the seniority levels could vary. It is the author’s experience that even if companies distinguish between business continuity (disruptive incident management) and crisis management, the resultant teams will not differ significantly. However, BS 11200 differs slightly from the ISO 22313 guidance in that it does seem to be informed (or, rather, influenced) by literature beyond other ISOs, even if it is not acknowledged or referenced.

Additional complementary guidelines

The complementary ISO 22398:2013 Societal Security – Guidelines for Exercises is authored in the same style as the other documents, but pragmatically, in this case, tasks are sometimes ascribed to named roles such as “exercise programme manager” (para 3.8, p. 2). It has both more helpful direction and a distinct flavour of emergency services exercises illustrated by the concentration on exercise safety plans (5.2.14.3, p. 19). The proposition that multi-day exercises are likely (5.3.1, p. 19) seems very naïve to most commercial practitioners, a sentiment voiced by the respondents in the Elliott and Johnson (2010, p. 52) survey. This feature confirms a slightly public-sector or emergency services-oriented authorship. Crucially, this ISO differs markedly from many others in that the language is more erudite, balanced and precise, certainly less patronising, and axiomatic advice is offered. For example, “After action review” (para 5.4.3) offers the insight that the “same format for the critique of exercises should be used for an actual incident to allow for comparison between simulated and actual events”. This suggests some intellectual, if not academic, rigour or common sense. This trait is echoed in the annexes; Annex E (p. 33) makes a clear but unreferenced link to academic input with “ethnographical methodology” and “primary and secondary research” being used to inform and thus “enrich” exercise scenario construction. This is arguably the first ISO (in this area) to promote an overtly academic process to ‘enrich’ a process, even if one senses, yet again, the work of Borodzicz.

Resilience standards

BS 65000 (2014) *Guidance on organisational ‘resilience’*, which is, according to ISO 22301 (2012), the “product or result of business continuity”, presents an unusual document. It paints a utopian vision of how ‘resilience’ can make an organisation “adaptive, cooperative, agile, and robust” and able to “adapt to everything from minor everyday events to acute shocks and chronic or incremental changes”. (p. 1). (Do bear in mind that this is the apparent paradigm on which resilience planning is based.) It presumes the reader can define an acute shock or chronic change. It does all this whilst defining resilience in ten ways in the first five pages alone:

Resilience is a strategic objective...

Resilience is a relative dynamic concept...

...resilience is a goal, not a fixed activity (p. 1)

Resilience involves dealing with disruption, uncertainty and change...

Resilience is therefore a strategic concern...

Resilience is inherently relative...

...resilience should be informed by effective risk management...

...resilience is also closely aligned with the concerns of most managers... (p. 3)

...resilience is therefore an outcome of good governance (p. 4)

Resilience requires the ability to make good decisions... (p. 5)

All these comments might be correct; however, so many quasi definitions of the key topic suggest semantic confusion, intellectual puzzlement or dissent amongst the authors. Norris et al. (2008) helpfully and deliberately summarised 21 academic definitions, however, even universities such as Buckinghamshire New University, Bucks.ac (2018) appeared to struggle to describe the position of their own masters level resilience degree course in their advertising literature.

https://bucks.ac.uk/courses/postgraduate/management-and-professional-studies/pt/organisational-resilience-pt_251118

Organisational resilience requires, because of the growing inter-relationship and blurred boundaries between the various elements, and the constant development of new risks and the need to mitigate them; the development of organisational and individual capability and knowledge across a range of contributing areas and of the organisational behaviours needed to support them. Therefore, this programme is designed to attract and educate those with a specialist interest in the following areas and sub-disciplines:

- security
- business continuity

- crisis and incident management
- emergency management
- disaster response and recovery
- threat risk and impact perspectives.

Clearly given the ‘sub disciplines’ noted above, the university inclines to the sentiments of Wong (2009) who argued that ‘the discipline of BCM should encompass far more than the common activities covered by business organisations,’ p.64. However, in trying to accommodate all the complex relationships in a single paragraph the meaning becomes somewhat opaque.

The actual definition of organisational resilience is very broad indeed (para 2.3, p. 2): “ability of an organisation to anticipate, prepare for, and respond and adapt to incremental change and sudden disruptions in order to survive and prosper”. This definition goes far further than the original definitions noted by Norris et al. (2008) and Alexander (2013) on the properties of wooden structures. In doing so, it paints the authors into a corner of portraying resilience as a corporate panacea which would arguably take vast and disproportionate resources to achieve. Para 5.4 (p. 8) typifies an un-costed and unsubstantiated proposition of what needs to be achieved to deliver resilience. It is not wrong per se, but it makes no attempt to indicate just how this Sisyphean task could be tackled and controlled. Instead it blithely suggests that it needs at least 21 corporate “operational disciplines to be integrated”; commercially coincidentally, 13 of these disciplines have an accompanying ISO or BS documentation. This “deliberate over complexity for commercial gain” was noted with some disdain by respondents in the report of Elliott and Johnson’s (2010, p. 31).

Like ISO 22398, BS 65000 (2014) contains some academic inferences such as para 5.5 (p. 10) which, momentarily at least, evokes the work of Toft and Reynolds (1997), but by para 5.6.2 the tone has reverted to a hyperbolic vision of “shared expectations” that will apparently “strengthen its resilience”. Figure 2 (p. 12) and figure 3 (p. 13) are undoubtedly more pragmatic and applicable in nature.

Information technology standards

Information Technology standards are included in the review because they specifically allude to business continuity in their title. (ISO 27031, (2011)) *Information technology*

– *Security techniques – Guidelines for information and communication technology readiness for business continuity.*

This document retains the same essential format as the other guidance documents. However, the advice seems more precisely phrased, the terminology is far less dramatic and excessive claims are eschewed. Even in para 5.4 (p. 7), where the benefits are listed, caveats are appropriately inserted. It notes that compliance can allow the company to “potentially gain competitive advantage...”. It advocates that a company “has ICT services that are cost effective and not under- or over-invested...”; this cautious language is at odds with the purple prose of BS 65000 (2014). Whilst different authorship might account for some variation, ISO 27031 (2011) does appear to be a more prosaic and measured guidance document. It is interesting to speculate that the more concrete, procedural nature of IT recovery catalyses a more pragmatic approach than does the rather conceptual notion of resilience.

BCI and HMG supporting publications

Having now reviewed Good Practice Guidance and the ISO standards, that are often used as indicative of best practice, attention now turns to advice, studies and ‘white papers’ that are likely to be influential on practice and which originate from the BCI and HM Government. One might expect them to be authoritative, well researched and value-free. The selection of the literature is both recent and broadly representative of the overall tenor of their publications and the resultant body of knowledge.

Commentary on the BCI Horizon Scan (BCI 2017)

The *BCI Horizon Scan* (2017) was selected for inclusion as it was as up-to-date as possible at the time of authorship; it should represent the peak of the BCI’s work and be a part of what is, in effect, a longitudinal study (it is the 6th horizon scan). It should give a valuable insight into the ‘state’ of BC 2017 and beyond; its exclusion would have been neglectful.

In the foreword (un-numbered pages on a downloaded version) the BCI Executive Director and the BSI Chief Executive make some sweeping but unreferenced claims. The former notes: “Cyber-attacks and data breaches continue to cost organisations billions of dollars annually...” and that extreme weather events are becoming “less and

less predictable with apparent acceleration of climate change". (There is a body of research that indicates that they are becoming more predictable, Bazerman (2006) and Scafetta (2012).) The BSI CEO quoted a 'PwC' report two years previously that "90% of large organisations' suffered a 'breach' of data." (Breach and data are not defined in his foreword and the exact PwC report is not listed). He added that, "Organisational resilience reaches beyond risk management towards a more holistic view of business health and success". All this is claimed whilst (in a communication to the author 03-03-17) the author of the report, the BCI 'Senior Research Associate', admitted that the BCI did not hold data on the actual BC/resilience spend or budget, even in percentage terms, of the organisations concerned. It just does not appear to lend any credibility to claims of efficacy when the annual spend on resilience in the UK (or elsewhere) is not known by the representative institute.

Essentially the work focuses on the threats and disruptions summarised in section 2 (p. 7) In brief, respondents were asked to examine a list of 29 potential causes of an incident (which the authors of the report then termed 'threats'). These ranged from 'Animal disease' to 'Social civil unrest'. The question asked, with multiple responses being allowed and five levels of concern being offered, was,

Based on your analysis, how concerned are you about the following threats to your organisation in 2017?

The results were then described, in an homage to Top of the Pops, as the "top 10 threats". With resulting comments, (p. 6), such as "new laws and regulations enter the top 10 this year...meanwhile health and safety incident drops out of the top 10." Further comparisons by country, sector and size are then offered to illustrate regional differences.

Fundamentally and most critically, however, the 'index term', namely the expressions of 'concern', have been transposed by the authors into 'threat' assessments and renamed. The numerical endorsement of 54% of responders saying that they are extremely concerned about cyber-attack catapults it into first place for the third year running. Readers of the report might be tempted to perceive that cyber-attack is the top threat to organisations, therefore they too must pay cognisance to it and thus the

heuristic of availability cycles onward. Even those who selected this category will feel vindicated by their decision.

It is very difficult not to see this type of horizon scanning as being heavily prone to the cognitive biases described by Tversky and Kahneman's (1974) heuristics. It appears to foster a classic case of judgements made under uncertainty with strong elements of 'availability' and high levels of 'imaginability' which prejudice objectivity. Notably, the transposition of the term 'concern' to 'threat' is also a misuse of the 'index' term in the question. Being 'extremely concerned' (the highest level of descriptor) about an issue might well refer to the potential damage or effect cyber-crime could cause, as opposed to its probability in a well-protected organisation. It appears just too elastic to metamorphose the index term 'concern' into a 'threat'.

In terms of 'reasonableness', is it acceptable to view this 'scan' (the 'horizon' was surprisingly limited to one year, 2017) as indicative of opinions and, as the question originally stated, 'concerns'? The regional and other variations are of genuine interest and it gives a succinct overview of several issues and is valuable for that alone, even if it did not warrant 32 pages of print. However, it arguably lacks credibility as a persuasive horizon scan when it is based on nothing other than cumulative perceptions and delivered with overblown rhetoric. (Note Taleb's (2010) caveat of repetitious statements not constituting evidence.) The other alarm bell that is sounded by this type of work goes back to risk homeostasis and Adams's (1995) contention that focus on risk in one area can leave others dangerously neglected. Might this survey with a clear focus on technological issues neglect others at some peril? The authors also do not seem to have appreciated the work of Slovic (1987) who cited Wildavsky (1979), Starr (1969) and Fischhoff et al. (1978). All of their work was oriented to the perception of risks and the curious ways in which responses are skewed by various factors such as benefit, voluntariness, expert and lay opinions, and to some extent the degree of publicity attached to the risk. A single reading of Slovic (1987) should prompt any reader of the BCI (2017) Horizon Scan to recall Wildavsky's (1979, p. 32) prescient 'crie de coeur':

How extraordinary! The richest, longest lived, best protected,
most resourceful civilisation with the highest degree of insight

into its own technology, is on its way to becoming the most frightened.

Even if we apply the test of reasonableness to this work, it fails. It is unreasonable that the 'academic' researchers of the representative institute transposed an index term of 'concern' to become 'threat', failed to appreciate any heuristics biases, tendencies or other factors to balance the stated opinions and provided no references for the claims made. One also suspects that, whilst the BCI is a representative body, its Horizon Scan might not be entirely value-free.

The BCI 2020 UK Group White Paper

This document was the BCI's response to the burgeoning use of the term resilience. It was authored by the BCI's Senior Research Associate assisted by the BCI 2020 'Think Tank', some 15 of the "best minds in BC and related fields" (p. 12)

It is written in an unusual style with unattributed, highlighted quotations stretching across the pages at regular intervals. Many of the quotations conveniently lend credibility to the relatively short commentary, some nine pages with considerable 'white space' and scarcely 1,500 words.

The quotations are hard to understand as they seem to embrace too many ill-defined management phrases:

Business Continuity is integral to resilience as long as it displays cross boundary collaboration, understanding of networked risks and agility during crises. (p. 2)

The main text is authored in a similar rather obtuse 'sound bite' style:

Business Continuity has a leading role in building this quality given its understanding of a business and where value is generated within it. (p. 2)

The not unexpected fundamental point being made is that BC is the "focal point of co-ordination" (p. 4), for the complementary disciplines involved in resilience. Consequently, 'practitioners', 'professional bodies', 'regulators', 'universities' and

'business leaders' should support the growing focal role of the BC managers in taking on the mantle of resilience. Notwithstanding the essential simplicity of the argument, no data is offered to support such a practice and the rhetoric turns to repetitive exhortations. These exhortations have varying degrees of compliance with English grammar and syntax and are spiced with frequent unfortunate choices of metaphor.

Maintaining trust and performing obligations among organisations, their suppliers and regulators, as well as their wider network will remain essential. (p. 6)

However, they need to use their background as a 'scaffold' for acquiring complementary competencies, knowledge and experience from other disciplines. (p. 10)

While many disciplines have their own reporting at top level, there is a gap in professionals who can combine these insights into a readily understandable and actionable format for presentation to top management. (p. 5)

There are 11 references offered; only two stem from sources beyond the BCI. One cannot help feeling disappointed that such an opportunity to debate the changing nature of BCR and the managerial competencies required was treated so shabbily. Just quite what a practitioner is now meant to do, or is enabled to do, having read this remains unclear. It lacks evidential authority, is poorly written and avoids any coherent debate of clearly important issues. This rather harsh critique is warranted by the BCI's claim that their senior research together with the input of 15 of the "best minds in BC" authored it. The 'White Paper' is far from clearing the critical hurdles erected by Minger's (2000, pp. 225-226) four critiques of 'rhetoric, tradition, authority and objectivity'. Stewart's (1984) questions of credentials, competency and evidence, together with Damer's (2009, p.7) burden of proof resting with those setting forth the position and Lord Steyn's definition of reasonableness, make even the title of 'White Paper' risible and any further analysis nugatory.

A handbook for managers. Home Office (1999)

HM Government's advice is almost as prolific as the BCI's. Titles from the Cabinet Office include: (2011) *Why Exercise Your Disaster Response*, (2012, a.) *Emergency Preparedness*, (2012, b.) *Emergency Response and Recovery: Non Statutory Guidance Accompanying the Civil Contingencies Act 2004*, (2013, a.) *Exercises and Training*, (2013, b.) *National Risk Register for Civil Emergencies*.

However, an earlier document was selected for analysis, namely the *Home Office Business as Usual, Maximising business resilience to terrorist bombings. A handbook for managers*. Home Office (1999). Arguably it set the tone of the resultant debate and subsequent publications. It is especially interesting as it pre-dates 9/11 response, the engendered interest in the millennium bug and the subsequent UK legislation. Critically, it also first introduces the notion of resilience and gives it a very effective link to business continuity. Retrospectively it can be seen as a sane and cost-efficient idea in what became a debate to which every commentator appeared to want to add their own definition,

A Business Continuity Plan should be drafted in such a way as to cover all risks...Our aim is to show how such an all risks plan can maximise the resilience of businesses... (p. 4)

It 'trusts the reader' by using case studies to illustrate points. Its doctrines are introduced gently and without hyperbole, the case studies being presented quite neutrally. Indirectly, it commends a phased planning approach from initial actions, recovery, lessons learned and explains the 'Gold Silver Bronze' system without actually endorsing it for civilian use, (p. 12). The point so often made in subsequent advice and standards that the "commitment of management at Board Level" (p. 15) is important, is mentioned, but not over emphasised. The three stages of planning, 'incident', 'recovery' and 'continuity' seen in so many iterations are offered as practical advice. In terms of prioritisation, it offers a four 'P' reminder: People, Premises, Product and Purchasers. Again, this prioritisation reminder features in several plans in many variations such as People, Environment, Assets, Reputation (as used by Rio Tinto, the mining conglomerate, on all their plans), but the idea remains the same. The rest of the 21 pages consists of well authored advice couched in general but encouraging

terms and it concludes with a useful list of potential contacts and resources. Albeit that the document was not intended as a self-help manual for continuity, it nevertheless stands scrutiny with some far lengthier tomes. More importantly by far, it avoids the criticism that so many articles overcomplicate the topic.

It is, in summary, a very good document (despite not being referenced) and is arguably ahead of its time. The advice is unbiased, value-free, based on case studies and very 'reasonable' in all respects. It stands the test of time in being far more informative, even now, than many comparable recent BCI documents that have been included in this review.

[A Business Continuity Awareness Week 2016 White Paper](#)

The Home Office Handbook's delightfully 'value-free' approach is a plaudit that cannot be bestowed on many BCI White Papers. This issue, which potentially denigrates practitioner advice, is illustrated with reference to *Business Continuity Delivers Return on Investment*, a *Business Continuity Awareness Week 2016 White Paper* (BCI White paper, 2016).

This document was a contribution to the 'awareness raising' activities associated with this week in 2016. Three very precise and distinct claims were made in the introduction: BCR plans justify lower insurance premiums; BC activities can improve efficiency, and their adoption facilitates easier contract negotiations. The format of the document comprised three sections, each one dealing with one of the claims and sub-divided into an opening debate, a case study and 'expert' opinion.

In contrast to many BCI publications, several references, within 14 lines of text, are offered in support of their contentions. However, in many cases, these are from their own publications. In one critical case for the justification of reduced premiums, McFarland (2014) is cited on (p. 2). It appears to be academic but sadly, on investigation, it transpires that this reference was simply part of a commercial website: (<https://www.clouddirect.net/resources/10-key-components-of-a-business-continuity-plan/advert>). This site offers hosted resilience cloud services and a free BC planning toolkit in the form of a 23-minute webinar. On this commercial location, it was alleged that a 15% premium reduction could be gained through evidence of a BC plan. It might or might not be true, but it is not an authoritative source and it certainly was not value-

free advice. Section one then continued the argument with the transcript of a representative of Zurich Insurance being interviewed. It was, however, noticeable that he suggested the BC plan be considered in the “grading approach...integrated in our pricing model.” (p. 3). This is not the 15% reduction trumpeted by McFarland (2014).

In respect of Section 2, ‘BC improving efficiency’, the White Paper devotes 10 lines to the proposition before moving on to a ‘case study’ of improved efficiency generated by an organisation being certified to ISO 22301. The reference for the case study reveals that it was in fact authored not by the company concerned but by the organisation’s auditors, the BSI, (p. 5). In this section, the expert commentary is based on the achievement of resilience and, whilst intimating that efficiencies are gained, no specifics are cited nor is any monetary value, even in percentage terms.

The final section, ostensibly concerning the benefits of BC facilitating contract negotiations, bizarrely hinges its argument around the Modern Slavery Act 2015. The ‘White Paper’ (p. 8) notes rather alarmingly that the Act requires “organisations to provide assurance through a statement that their supply chains are slavery and human trafficking free” and that prosecution and fines are applied to those who fail to comply. This is technically true but very misleading. Only firms with a turnover of £36 million p.a. are expected to comply. As this turnover level is usually associated with medium or large enterprises, it applies to 0.7% of businesses as defined by HMG figures in (Department for Business, Energy & Industrial Strategy, 2016).

Furthermore, the Government advice in section 2.6 of (Gov.UK., 2015) indicates that failure to comply is addressed by an injunction to comply, which, if ignored, renders the company in ‘contempt of court’ which has unlimited fines. Strangely, the Government seems to take a back seat in terms of ‘policing’ the act. Section 2.8 of the guidance places the burden of monitoring “businesses not taking sufficient steps” on consumers, investors and NGOs! This is somewhat at odds with the apparent claim of the benefits of BC when it is inapplicable to the remaining 99.3% of businesses unaffected by the Act.

The Case Study expounds on the benefits of ISO 22301 for a car maker. Perhaps unsurprisingly, it was authored by their auditors, the BSI, and the following ‘Expert Opinion’ puzzlingly related to neither the Modern Slavery Act, nor to ISO 22301.

Whilst it was encouraging to see attempts at referencing and a further reading list being offered, the inexactitudes, misconstructions, self-referencing, commercial bias and inelegant phrases remain a constant. As another seminal 'White Paper', it says very little indeed and what it does contend is unproven and far from error and value-free.

Discussion

If there was any hope that the comments of those interviewed by the Elliott and Johnson (2010) report who advocated simplicity, clarity and avoiding the dangers of McDonaldisation (Ritzer, 2008) would have been taken to heart by the BS/ISO technical committees, they appear to have been dashed. Whilst some standards and guidance are better than others, generally, if these documents were not ISO standards, (which have clearly influenced several major organisations to adopt and be audited to their requirements and definitions) they would not stand too much scrutiny. Their language, syntax, grammar, logic and literacy are of questionable quality and their unsubstantiated claims with circular referencing to their own standards lacks validity in such an influential set of documents. This is not to say that the standards and guidance are wrong nor actually right. It is not possible to say; as Boin (2006) observed, nobody has sought to validate any of the approaches advocated nor the claims made.

One cannot avoid making such swingeing criticisms when their claims of benefits are high and simultaneously the flaws in the works are starkly evident. However, taken as a whole the advice given is reasonably coherent, the terms reasonably defined and reasonably consistent. Perhaps, given that the works were authored in 'international English' by a technical committee, a 'reasonably good' ISO is all one can expect, (back to the test of the reasonable commuter). Also, one cannot refrain from observing that almost the entire 'box set' of ISOs on these topics have been authored by (without mentioning names and thereby personalising commentary) primarily the same people namely, two academics, five to ten consultants, four civil servants working in the area and a few assorted practitioners working within companies. This core group has been instrumental for the authorship of almost all the content. Unsurprisingly, this core group has close links to the BCI and in some cases to Cabinet Office. This is not offered as criticism, merely as comment, and a caution that such a cohesive group might be subject to groupthink as described by Janis (1982). All the authors are doubtless

genuinely experienced, but their repetitive self-referenced work does not, as Taleb (2010) and Le Carre warn, per se, convey validity on their work; but nor does it mean that they are wrong. It just begs a massive question as to the proverbial 'elephant in the room' and how one validates such guidance.

In respect of the BCI, it is of concern that almost every publication which has been considered has suffered criticism, some of which verges on questioning the entire validity of so called 'white papers' and horizon scans. However, it should be recalled that the criteria to which the publications were subjected was neutral and not of the author's design. Nor has the author deliberately selected questionable texts. In the author's experience, these are the seminal texts that are read widely in the BCR community and can even be found on University reading lists.

The BCI and the BSI, who audit the ISOs, have reached such a close working relationship that it might be termed symbiotic or, less charitably, incestuous. As noted in the body of the work, the ISOs appear to have become synonymous with best practice even though they are simply only an auditable standard, and both bodies reference each other's materials. Evidence of this is that the BCI Horizon Scan 2018 is being launched 'in association with the BSI'. As a generalisation, their work and publications share similar deficiencies; their work is not value-free, it is not academically referenced nor validated. Claims for validity or efficacy are just hyperbolic marketing, it is poorly written, it seldom says anything of substance, its statistics are 'creative' at best and both organisations have evident economic motives for their activities.

In contrast, the HM Government publications in general are balanced, erudite, informative and precise. They are certainly value-free and whilst they might favour the public sector and appear commercially naïve, the advice is coherent, cogent and as far as is possible correct.

With reference to Kay (2011) and the idea of obliquity being used to tackle complex problems through a series of successive comparison it would appear that the advice on how the issues should be managed is little considered. There appears to be an implication that if the processes of the Good Practice Guide are followed or ISO certification is gained then the resultant plan will work. None of the sources considered

in this chapter offer any conceptual advice as to any management methods that are recommended for use in such events.

The sadness is that, in the author's experience, the accessibility of these materials and the far greater marketing of them to the BCI database renders them far more influential than all the academic bodies of literature. The authority of the BCI goes largely unquestioned and the British Standards/ISOs remains similarly highly regarded. Juvenal would conclude that nobody is guarding these custodians of standards and the resultant poor quality of products and materials are paradoxically counter to their intent of professionalising the discipline.

Chapter 7 Complementary popular literature

Introduction

This chapter tackles a growing section of the books and research papers which are authored for the practitioner. Some are authored by academics, some are collaboration between academics and practitioners and some are by practitioners who have made an attempt at referencing and an academic style is evident, but it is not peer reviewed. Naturally efforts have been made not to critique an individual piece of literature in isolation but rather in so far as it is representative of a body of knowledge and some individual criticism is necessary to distinguish the good exemplars from the bad.

Academic/practitioner collaborative articles are not new but are necessary in BCR to penetrate the osmotic gap that has been highlighted. If, as has been shown, Good Practice Guides HMG advice and ISOs are a 'Curate's egg', good in parts, and that BCI publications are academically illiterate and far from value-free, one turns to academic collaborations with or specifically for practitioners, to see if such work can better inform professional practice. Naturally both the quality and utility of such articles varies, and the selection offered is orientated around this idea so as to amplify this distinction thereby directing future endeavours.

Research papers

The first document considered is very encouraging indeed and contrasts excellently with the second document which is its antithesis. Both are academically authored for a practitioner audience and this provides an ideal comparative.

The same plaudits for the HMG advice in the preceding chapter applies to *Roads to Ruin* (Airmic 2011). This is highlighted as an example of how the BCI literature might be presented in future. Despite commercial and trade association sponsorship it is value-free. Its highly academic authors have used appropriate language to present the materials to an informed, but non-academic, audience.

Airmic, (2011), was selected for inclusion as it was authored by three professors and one barrister, for Cass Business School on behalf of AIRMIC and sponsored by Crawford and Lockton. This is an excellent examination of major corporate crises in

the last 10 years. It hinges around the question as to how can risk inform corporate strategy? It covers crises precipitated by explosions, rogue employees, IT, product failure, and pragmatically the organisation's own managers. The work is well referenced, literate, precise and the critical lessons are drawn to the attention of the readers. For example, "underlying risks" (p. 5) are listed with a succinct paragraph outlining their nature and then they are cited later in more detail. Rather like the Home Office (1999) advice, it credits the readers with discernment and allows them to reach their own conclusions. As with anything that is first class, when there is little wrong, there can be correspondingly little criticism.

Sadly, the lack of critique cannot be applied to the work of Denyer (2017). When a colleague thoughtfully sent me Denyer (2017), I rejoiced that here was, at last, academically-referenced evidence of the efficacy of resilience. Its claim to prominence and influence was as follows:

The BSI teamed up with Cranfield School of Management to pull together the best available research evidence on Organisational Resilience. The evidence assessment, covering 181 academic articles, was supplemented with five case studies. (p. 5)

This work had to be included in the review. It promised to be the best of articles in that it was a genuine collaboration between practice and academia, it was authored by prominent academics and, suitably referenced, it promised 'evidence'.

Having read the article, I wondered where to place it in the review as it was written by an academic with evident BSI input. Eventually, I felt it should go in this chapter. The academic 'abstract' has become a trendy 'Snapshot' The foreword, authored by the BSI, included the un-attributable illiterate but supportive margin quotes such as,

Nine in ten [*of what was not stated*] saw resilience as a priority for their business, while eight in ten believed it to be indispensable for long-term growth. (p. 6)

Sentences replete with jargon and a rather jarring five verbs in one sentence are typical of the style of the paper's strident 'call to action'.

Striving for excellence requires business leaders to challenge complacency, promote vigilance and embrace the need for continual improvement. (p. 6)

Interestingly and encouragingly the academic authors had utilised an approach to the study which differed little from my own albeit that their 'rapid' evidence assessment' was based only on web searches.

This report summarizes the findings of a rapid evidence assessment (REA) and case studies of Organisational Resilience. First popularized in evidenced-based medicine, Rapid Evidence Assessments (REAs) are used to identify and evaluate claims about what works and provide an evidence-informed basis for managerial action. An REA is a tool for getting on top of the available research evidence within a relatively short timeframe. (Appendix 1 unnumbered)

This encourages the reader to expect a comprehensive provision of evidence to support the assertion that organisational resilience (presumably as defined by the BSI) has some efficacy and utility.

The authors begin by offering a model of "the evolution of thinking on 'resilience' over the last "40 years". Phase 4 which, according to a graph with no exact time scale, began some 20 years ago and is titled "Adaptive innovation". Its definition is as follows;

Adaptive innovation. Organisational Resilience is created through creating, inventing and exploring unknown markets and new technologies. Organisations can be the disruption in their environment i.e. progressive + flexible. (p. 7)

Despite being involved in running a resilience consultancy for some 22 years the author and my senior colleagues were unfamiliar with this concept or term of "adaptive innovation". The subsequent unsubstantiated, implausible marketing proposition combined with a sentence 'left hanging' and no authority being cited

causes some doubt as to the promised provision of evidence. The authors then develop these phases into a 'tension quadrant' in which competing behaviours react.

The various phases are then analysed in a rather unusual fashion in which seemingly contradictory management advice is spun and jumps from authority to authority; very little of which is either to do with resilience nor is it any evidence of the 'paradigm' of resilience which is essentially, this paper's proposition. An example is offered below.

...leadership may be required to conflict, create controversy and foster discomfort (Lichtenstein and Plowman, 2009; Heifetz, 1994). Leadership can also help to create an atmosphere that tolerates dissent and divergent perspectives on problems (Heifetz and Laurie, 1997; Uhl-Bien et al., 2007). Innovation requires people to experience and observe the situation from multiple viewpoints, listen to dissident voices and encourage divergent perspectives on problems (Heifetz and Laurie, 1997). (p. 13)

In other cases, as illustrated below, a 14-page academic article is cited and the single word 'wicked' is all that is quoted on the matter of behavioural change, but it presumably assisted in getting the requisite 181 references. A sample from the original is offered below.

Problems that involve changing behaviour, values and priorities, or that are indeterminate in scope and scale, are particularly 'wicked' (Rittel and Weber, 1973, pp. 155-169)

The paper culminates in the proposition of a new '4sight' model of achieving resilience which in many ways is useful to have as a visualisation of a concept, albeit this section was almost void of references in support of the propositions. Unsurprisingly, the '4sight model' is compatible with the BSI's familiar 'Plan Do Check Act' process and a rather contrived comparison is made.

The criticism of this work is harsh because it falsely promised evidence. Instead, an amalgam of 'rapidly' gained material, as opposed to evidence not altogether germane to resilience, was stitched together with soundbite quotes of dubious relevance to form a tentative paradigm which is aspirational and untried. However, this is not the

worst of it. The worst of it is that a reputable team of academics, led by a professor, failed to find the evidence, substituting it for brief allusions to HRO systems, the works of Perrow, Reason and a few others together with a patchwork of authors on management to illustrate the difficulty of achieving the BSI's standard. In doing so, the quantity of referencing triumphed over the quality of argument. If this is a genuine attempt to bridge the gap between academia and practice it is to be applauded and hopefully repeated. Metaphorically it exhibited the nerves of a 'first date,' and a 'blind date' at that. The value of future liaison remains uncertain.

Advice and reference books

The quasi military alternative

Occasionally, a senior military officer feels the imperative to translate military doctrine or literature for civilian use. However, the translation of military notions for civilian application can be uneasy and the results patronizing and faintly absurd. Tom and Barrons (2006) was selected as an example of this genre where the intention to civilianise military doctrine was laudable, but the result was disappointing. It was co-authored by a business consultant on leadership and a Brigadier who had done a postgraduate degree at Cambridge. The Brigadier went on to become a full General in charge of the Joint Forces Headquarters, all of which should have given the book some credence. Importantly the book has been mentioned to me by practitioners and there is some personally based evidence that they do have an influence on practitioners.

Wisely, their preface alludes to the reticence of business to adopt military doctrine and the authors admit it "has to be put across in the right way" (p. x). However, in making the doctrines accessible, some presentational compromises appear to have been made. It presents military doctrine in terms of the 'Seven Secrets' which makes it sound akin to a Papally prohibited prophecy. The need to appeal to a non-military audience, and the need to make the reader feel at home, led to the regular summaries entitled the 'Commander's Comfy Chair Session' becoming faintly 'Monty Pythonesque'. If the book is designed for civilian senior executives of 'General' calibre such concessions to popularity are arguably unnecessary and detract from the potential message. However, the ability to relate "Dynamic Manoeuvre...part philosophy and in part a guide to best practice in planning and in operations" (p. 241)

to the business sector was never going to be easy. In this case, it presents vignettes of cases studies without petty fogging detail which might bore the reader. For example, the Glaxo Smith Kline merger is dispatched in less than one page (p. 235), and the Korean War in less than half a page (p. 243). Consequently, its appeal and ease of reading is at some 'academic' cost. In this case, the "Principles of Winning Traffic Light" (p. 77), which is taken directly from the *British Army Field Manual Principles of War* (1985), is unreferenced and the headings are identical; it is sheer plagiarism. Referencing would have lent it more authority and, if sensitively done, would not have detracted from its appeal to a wide readership.

However, this is not the end of the story, and the idea of Tom and Barrons was essentially good. It was the execution of the idea which was flawed, and the concluding chapter offers some gentler options for consideration in the translation of military literature to the civilian arena of BCR.

Three contrasting self-help books and a definitive guide

There are several BCR self-help books and the author has often observed a wide range of titles on visits to clients' offices. For ease of review, three authors were chosen as being representative of this body of literature, together with what claims to be the 'Definitive Guide'. All the books are referenced to a greater or lesser degree, they are intended for practitioner use, are comprehensive in nature and of a similar length. The first authors Graham and Kaye (2006) are academically unqualified but respected practitioners with a major international law firm who are published by a rather obscure house with limited titles. The second author, Heath, R. (1998) is a managerial psychologist holding a doctorate degree who has worked in two Australian universities before moving to London as a consultant. Heath is published by the Financial Times. Reason (1997) was a professor of psychology at Manchester University. The Definitive Guide is an edited collection of chapters on the topic which are mainly authored by practitioners.

Graham and Kayes a simple book

Graham and Kayes' (2006) book has been selected as representative of the stable of self-help business continuity and related fields that are published by Rothstein. Their 400-page book is certainly very comprehensive. It is endorsed by the BCI, the BSI,

(who included PAS 56 in the annexes), the Disaster Recovery Institute and the (ironically titled, now bankrupt) BCR training organisation 'Survive'. It contains advice and tables for almost every element of the discipline. It is liberally sprinkled with case studies which are commendably varied. They range from dramatic catastrophes though to mundane callout problems. The work is referenced to some extent, though most of the references are to open source commercial reports, the trade press and BCI papers; academic references are few, and only 13 references might be termed 'academic'. Strangely, the least referenced chapter is titled 'Rehearsals and Exercising of Plans and Risk Decision Making'; one might have expected more referencing in this decision-making area.

Their language grates on the ear and the syntax is often very unusual, for example,

Could that information be transferred or better downloaded onto suitable, smaller computers that could be bought into use immediately to carry them through the period before the full mainframe service is reinstated. (p. 161).

On other occasions, the advice does appear confused and incoherent.

...the unthinkable event should form part of scenario management and the consideration of the more predictable event should form part of the risk assessment.... It is increasingly necessary for every organisation to evaluate "unthinkable" worst case scenarios. (p. 347)

Despite the language being irksome, coherence patchy and referencing weak, the overall advice is good. The comprehensive nature of the consideration of all aspects of the discipline is of appeal to a practitioner. Certainly, a reader could follow this advice and make a good attempt at authoring the necessary documentation. The authors are also pragmatic as opposed to doctrinaire. They concede on page 350 that a small organisation does not need the management structures of a large firm, albeit their tasks remain similar. Fundamentally, this is a good book for the practitioner despite the lack of underpinning academic authority.

Heath (1998) authored one of the most comprehensive guides to resilience ever. Almost 20 years old, it still appears 'up to date'. Several of the phrases used have recently been rehabilitated in practice, for example "Maximum Acceptable Outage" (MAO) (p. 60). In all respects the book is comprehensive, thorough, very well referenced and it goes far beyond its title, 'Crisis Management', giving clear explanations of all business continuity practices including risk assessments in chapter 2. The advice is precise, simple and well argued.

In reality, preparation for probabilistic events needs to be based on the fact that the event will happen – rather than using the mental traps of 'won't happen for a long time' or 'just happened so won't happen for another long period of time'. (p. 39)

Given the detail and consideration of the whole range of resilience topics it is therefore surprising that chapter 11, 'Response and recovery plans', is both one of the shortest and least referenced of any chapter. (A noted similarity with Graham and Kayes (2006)). Notwithstanding its brevity, its advocacy and content laid the foundation for many subsequent commentaries. Heath stressed "flexibility" (p. 253) even to the point that "planning that proves inaccurate is not a waste of management time" (p. 254). Whilst in the "components of a plan", (p. 256) several of the headings might be better sited in a policy document, the proposal of distinguishing between immediate responses and subsequent recovery, (p. 259) has survived and has been incorporated into modern standards. He also advocates the use of checklists, almost to the point of excess, (p. 259), but his recognition of this necessity and the flexibility it engenders is endorsed by many other academics. His "hints on planning" (pp. 261-264) are some of the most pragmatic, concise and sensible found in any documentation, for example, "define a crisis by the effect on response resources rather than by type of incident", is a proposition taken up by several subsequent academic and practitioner commentaries. Heath's most notable chapter is the last, chapter 18, which devotes itself to a consideration of the development of the "resilient organisation or community" (p. 437); this predates the current resilience debate by about 15 years.

Normally a book by James Reason (1997), a former Professor of psychology at the University of Manchester, would undoubtedly be placed in the academic review chapter. However, because of Reason's own comments in his preface it has been included in the non-academic literature. In doing so, it provides a stark comparative for the proposition of "4sight" (Denyer 2017), reviewed earlier. It would be very difficult to propose a literature review without including the work of Reason (1997). Not only does Reason have a uniquely readable style, but he also adds notes to the references to assist the reader. For example, a reference is given to Weick (p. 39) following which Reason adds, "Karl Weick is one of the most perceptive of the social scientists writing about organisational accidents." His concessions to the lay reader also extend to simple tables, diagrams and comparatives, for example almost all the explanation of "administrative controls" (pp. 62-63) is diagrammatic; were it in prose it would be turgid indeed.

His prose has a lightness of touch and often memorable, subtle humour "The 'Swiss Cheese' Model of Defences" (p. 9) and importantly, pragmatism. In a discussion of the dangers of defences, he entitles a paragraph "Killed by their Armour" (p. 41) and illustrates the notion with a summary of the battle of Agincourt. Later (p. 171) he alludes to pragmatic factors such as budgetary constraints and the problems for regulators in a section titled, "Damned If They Do: Damned If They Don't." It is phrased in the accessible language of the pub discussion but made academic, and Reason is to be commended all the more so because this is exactly what he set out to do. In the Preface, he states bluntly,

This book is not meant for an academic readership, although I hope that academics and students might read it. It is aimed at 'real people' and especially those whose daily business is ...the risks of hazardous technologies. (p. xvii)

Reason distinguishes what his readership requires but achieves it without patronizing the layman; full references and complex arguments abound, there is nothing dumbed down here, rather his amazing skill is in making the complex, comprehensible. One of the criticisms of many other works is their concentration on the massive catastrophic

event which occurs seldom and only to specific types of industry. Reason apologetically justifies their inclusion,

This is not intended to be another catalogue of accident case studies.... But the real test is whether or not these ideas can be translated into some improvement... (p. xvii)

Whilst not all of Reason's work can be applied to BCR planning, there remains a large corpus of the work that can indirectly inform planning considerations.

Unusually, Reason is not shy of utilizing some controversial military references where it is of utility to the argument. On (pp. 67-68) he debates the legendary prowess of the German soldier in the first half of the 20th century. He notes the influence of the "Auftragssystem", ('mission command' in modern UK military parlance). He continues to elaborate on this idea using Rasmussen's work on skills, rule and knowledge-based performance levels. (p. 69). This is illustrative of a notion that can be applied directly to the planning process. If one were to apply or blend Borodzicz's (2005) differentiation between incidents, crises and disasters to the respective skill, rule and knowledge-based levels, the 'fit' is imperfect. Nevertheless, one can see that in incidents the skill and rule-based performance will be required, but in complex crisis or disasters 'novel problems' will call for 'knowledge based' solutions. Whilst this is far from any formulaic planning template it should inform the planner as to the nature of the 'situations and control modes', that can be reflected in a plan.

Of all the literature so far reviewed, this is perhaps the best example of the effective bridge between academic and practitioner. It diminishes neither party and can be informative to both parties. It speaks with authority and offers far more than perhaps the author intended. It eschews commercial patronage and remains value-free. It meets what most or the contributors to the Elliott and Johnson (2010) study would deem valuable and laudable.

The 'Definitive Handbook'

The *Definitive Handbook* (TDH) (Hiles and Barnes, 1999) by its title alone makes a big claim which is debatable, but it is an interesting historical document containing an insight into the development of business continuity. It was published in 1999 and has

been revised and republished since. The book of nearly 400 pages is a compilation of chapters authored by nineteen different authors. All the authors were, to the best of this author's knowledge, and based on their declared job titles in the book, practitioners, mainly consultants and only one was academically qualified to doctorate level. Interestingly nine of the nineteen authors have listed companies and addresses that appear to be private houses as opposed to business addresses. Five of the authors are still known to be active consultants and of these, all are members or fellows of the BCI, one being the BCI's former technical director. Twelve of the nineteen contributors were then 'fellows or members' of the BCI. One can therefore conclude that any variation between the BCI and the authors' view is likely to be minimal. Furthermore, at risk of some guesswork one can also conclude from the addresses and titles mentioned earlier that the level of size and sophistication of the numerous consultancy companies was low, thereby indicating the relative infancy of the market place. Only the author with a doctorate offers any references at the end of the chapter. One can therefore perhaps assume that all the rest of the authors understandably expressed an opinion or insight based on their experience.

This offers a glimpse into the real origins of the discipline, fundamentally it was based on the opinions of 18 men and one woman, one Belgian, one author from Bangkok, but not Asian, four based in the USA, one based in Australia, two from Canada and the remaining ten from the UK. One can therefore also perceive a 'western' androcentric bias, perhaps understandable of its day but echoed still in the BCI (2016) *Horizon Scan*.

What is genuinely fascinating about the book is not the detail of the content, which now appears somewhat dated, but the order of events outlined in 'Section Two, Planning for Business Continuity: a "how-to" guide'. The chapter or section headings are worth some comparison with both the ISO, the GPG, the Dummies Guide and the Law Society Guide authored at least 10 years later. Some discretion has been taken to better illustrate the correlation of topic headings and to best show this, the headings of the TDH have been left in their original order and other section headings in the other documents have been moved to reflect their correlation with the Definitive Handbook.

Table 2 Comparison of literature development.

The Definitive Handbook (1999)	ISO 22301 (2012)	The Good Practice Guide (2010)	The Dummies Guide (2012)	The Lexcel Planning Toolkit (2011)
The Business Continuity Planning Methodology	Introduction	Embedding BCM in the organisation's culture	Introducing Business Continuity Understanding the Importance of Business Continuity	Introduction
Project initiation and Management	Sections 4 and 5 Context of the organisation and Leadership	Policy and programme management		Planning the project
Risk evaluation and control	8.2 Business Impact analysis and risk assessment	Understanding the organisation which includes business impact and risk assessment sub sections	Considering the Risks to Your Business	Understanding the practice which includes risk assessment and business impact analysis
Business impact analysis			Focusing on What's Important: Business Impact Analysis	
3 chapters on various aspects of BC strategies	8.3 Business Continuity Strategy	Determining Business Continuity Strategy	Selecting the Right Continuity Strategies	Policies strategies assumptions and scope
Emergency response and operations				In an annex at the end of the guide
Developing and implementing the written plan.	8.4 Establish and Implement business continuity procedures	Developing and implementing a BCM response	Developing Your Business Continuity Plan	The planning process
Awareness through auditing training and testing	9 to 9.3 performance evaluation	Exercising, maintaining and Reviewing BCM	Validating Your Business Continuity Plan	Training and exercises

Maintaining and exercising BC Plans	8.5 Exercising and testing			
Selecting the tools to support the process		Supporting information	<p>Ten Top Tips for Keeping Your IT in Great Shape 251</p> <p>Ten Tips for Communicating Internally During a Disruption</p> <p>Ten Tips for Effective External Communication in a Crisis</p>	Supporting annexes
Coping with people in recovery				
The missing elements				Background information

The inescapable close correlation of chapter headings and even on occasion the precise language used is amenable to different interpretations aside from plagiarism. The most charitable is that the original Definitive Handbook was a work of such persuasive power and thoroughness that all subsequent processes modelled themselves on it; all that has taken place since 1999 is a gentle evolution and refinement of language and presentational techniques. The least charitable is the equally valid perception that nobody has bothered to think of anything significantly new in the last decade and so have contented themselves with minor inconsequential semantic debates.

The truth probably lies somewhere between the two polarised views. Howsoever one perceives the development of BCR, it does seem apparent that very little can be considered innovative. The reasons for this are equally intriguing and difficult to prove and prioritise. Undoubtedly the sway held over the profession by the BCI as evidenced by the understandable prominence of their members in the TDH and the subsequent GPG and ISO's has ensured a degree of conformity. The lack of any academic critique, endorsement or validity to the assertions of the GPG or ISO or TDH is puzzling. The matter is not however inconsequential when one considers that the potential fate of many major companies and local economies depends on the implementation of plans that are devoid of any academic foundation.

However, we have what we have, and these appear to be the best guides to business continuity that are available. To some extent their habitual use, and indeed their successful use, in invocations has partially redeemed their lack of academic validation.

The 'coffee table intellectual' books

Perhaps every five years, a 'must-have book' giving a startling insight into some facet of business or even physics is launched. Within days the book is casually placed on the desk, coffee table, study shelf to indicate to passers-by the erudition of the owner. Within a month, not only have competitive titles been authored but the original book, half read, has not been finished. The author has been asked by many clients as to his opinion on these types of books and one can thus assume that they have some influence on the resilience planner. Two books (noted below) on 'risk' fit this format, being lightly referenced, and a third one comes close, but it is not quite the same, as its references cover 28 pages of small fonts type; the books are:

- Dembo & Freeman (1998) *Seeing tomorrow; rewriting the rules of risk*.
- Bernstein (1996) *Against the Gods; the remarkable story of risk*.
- Taleb (2010) *The Black Swan; The Impact of the Highly Improbable*.

Essentially these books seek to make difficult subjects; risk, probability, mathematics, uncertainty, philosophy and psychology amenable to a lay reader and entertaining at the same time. They all utilise 'reader involvement' with little games to illustrate complex theories. For example;

Dembo & Freeman (1998, p. 111)

Imagine you inherit a modest cash sum, say \$5000...

Bernstein (1996, p. 285)

...you liquidated your long-standing IBM position at \$80 a share. This morning you
check your paper and discover...

Taleb (2010, p. 138)

Take a room full of people. Randomly pick a number...

All three books are styled as a chatty conversational story, bringing you into the confidence of the author; almost like 'Letter from America' for those readers who can recall the down-home folksy delivery of the late Alistair Cooke. Some examples include:

Taleb (2010, p. 136)

one March evening a few men and women were standing on the esplanade...

Bernstein (1996, p. 202)

Arrow was born at the end of the first World War and grew up in...

The 'hard science bits' are dealt with deftly and the theory, in this example taken from Taleb (2010, p. 58) "*Confirmation bias*", italicised by Taleb, is discussed in relation to Wason's experiments. But Wason is introduced thus, "the first experiment I know of concerning this". 'This' is not a remote boffin in a white coat; it portrays Wason as Taleb's 'chum'.

All three books, despite being hard going in places, do succeed in making the topic interesting, accessible and even fun. They privilege the reader with the sort of 'factoid mesmeric' knowledge; it has not made you an actuary but a comment on probability can be impressive at some dinner parties. They are harmless, and this is perhaps their drawback. One must take their assertions on trust and little counter arguments are admitted. They all explain how and why probability is difficult to apply and how risk perceptions can be skewed or flawed. All three authors have a lot more difficulty in detailing how this might be applied to lay risk assessments in the BCR planning

process. All three books have an avuncular style which just misses being patronising. However, Taleb (2010, p. 332) is often too self-indulgent and strident. He often goes too far in condemning those who dispute his desired “Epistemocracy”, as “only fools and Platonists (or, worse, the species called central bankers)...”.

It is almost impossible to assess the degree to which these books have influenced planning. We do however hear many clients wishing to prepare for a ‘black swan’ event without, it appears, ever having read the book or seen such a swan. It appears convenient for planners to use the ‘soundbite’ phrase ‘Black Swan’ to describe almost any implausible scenario. As a practitioner, it also appears that the influence of these books is transitory. When the book was published several clients mentioned it was quoted in several conference speeches; in the last two years I have seldom heard the phrase used.

[An internal publication](#)

The BP (2006) book *Integrity Management: Learning from Past Major Industrial Accidents* rather stands alone for several reasons. It is self-published by BP, it is clearly influenced by Toft and Reynolds’ (1997) idea of isomorphic learning, its aim is modestly expressed, but far reaching,

This booklet’s only ambition is to be an awareness raising tool and to give useful references that may be needed for more detailed analysis. (p. 5)

Any of the 11 chapters can be read individually and the ‘non-oil industry’ incidents that are considered are related back later to the oil industry. For example, chapter 8 deals with the “Management of Change”. It offers 13 pages on the topic, it lays out the essential elements of a change programme and then debates case studies and draws distinct lessons from them. It offers nine further academic and trade references for detailed reading. The language is business like but clear and simple, the presentation is similarly logical. It is highly informative and authoritatively authored. The author has yet to read a better case study book. Amazingly the author(s) is/are not credited.

Discussion

Complementary popular literature is difficult to summarise in a discussion as it takes so many forms and guises. However, when one applies the criteria of criticism outlined earlier very few articles or books escape censure, but, when one applies the criteria of the 'utility to the planner' then a curious admixture of articles rises to prominence.

Two academic authored works, Reason (1997) and Denyer (2017) were designed for practitioners. They have equal academic credentials in that they both were authored by Professors, but their quality and utility are poles apart. One can conclude that academic authorship does not de facto convey quality, utility, nor applicability.

The value of two books which are less prominent and well regarded than many others and which would often go unremarked in a prose comparative. Graham and Kaye (2007) and the self-published BP booklet have greater utility to planning and in some respects planner education, than many of the other materials, even those in the other categories. This illustrates that an authors' mediocre literary skills and low academic qualifications can be compensated for by pragmatic useful advice and resonant case study analysis. This level of authorship seems reasonable for the non-professional audience. Whilst Reason would perhaps be the preferred author for the more experienced BCR manager, applying the somewhat informal 'Desert Island Disks, one book test', if I was a new BCR planner I would choose Graham and Kaye (2007).

In summary, only Graham and Kayes' (2006) amateur excursion into authorship, Reason's, gentle, pragmatic self-aware writings, the considered Home Office advice, Dr Robert Heath's diligent referencing, and CASS business schools very simple brief report withstand any of the criteria of critique that might be applied to them. The question of what quality these authors maintain, whilst others do not, paves the way for the final chapter. In this chapter some additional materials, never designed for the resilience arena but complementary to it and being good exemplars of their genre, are offered for discussion.

However, in the penultimate chapter one must return to debate the degree of professionalism. This was begged in the title as being inherent in BCR planning. If it

is a profession then the literature should be of a corresponding standard, if it is merely a business process then a lower standard might be appropriate.

Chapter 8 The Maturity of BCR as a profession

Introduction

The critical question debated in this chapter is whether or not BCR practice is a profession. The reason for this debate is that if BCR is a profession, then we have every right to be critical of the current literature; if it is simply a managerial discipline then we might still be disappointed, but we can accept that it suffices to inform a relatively hybrid set of managerial skills. Pauchant & Douville (1992) made the suggestion that crisis management lacked an overall paradigm as might be defined by Kuhn (1996). This was echoed by Alexander (2013) who levelled the same criticism to 'resilience' lacking the power to drive a paradigm. If resilience lacks an overall paradigm, does the lack of this paradigm reflect the non-professional status of the discipline or does it cause it? This might account for some of the reasons why the uptake of academic work is slow, why the referencing of ISOs is self-serving and how the discipline seems mired in iterative, poor grade debate. The issue of the degree to which the discipline of BCR is a profession was alluded to in the introduction and methodology in terms of it being a criterion by which to judge available literature. Now we turn to the academic concept of the profession and professionalism to further examine the issues that confront BCR literature in almost all its guises.

The nature of professionalism

"All professions are conspiracies against the laity."

George Bernard Shaw, Act 1, *The Doctor's Dilemma* (1911)

Despite Shaw's dramatic cynicism, over 100 years later, the popular notion of 'professionalism' still mirrors Evett, Mieg & Felt's (2006) summarised suggestion of a knowledge-based occupation, needing tertiary education combined with vocational training and experience. As Veloski, Sylvia, Fields, Boex and Blank (2005) noted, any profession jealously guards its attainment. However, linguistic or journalistic use and abuse has softened the meaning of professionalism. Evans (writing as a Professor at the School of Education at the University of Leeds) (2007, p. 1) wittily observed that with increasing disciplines seeking professional status, "Professionalism, it is generally believed, is not what it was". Nevertheless, it remains a condition to which the BCI, on behalf of their members, aspires. Interestingly, Evans (ibid.) went onto explain the

problem of the “widening of applicability from this profession, or that profession, to professions” with the inevitable corollary of diminishing value.

This possible dilution of the concept of professionalism was considered by Perkin (1989, p. 3) who noted that

as more and more jobs become subject to specialized training and claim expertise beyond the common sense of the layman so the opportunity to become professional permeates more deeply through the strata of society.

However, this burgeoning quest for professionalism has also created waves of uncertainty as to what the concept actually is. Citing several authors in support of their contention, Gleeson, Davies & Wheeler (2005) argued very strongly that professionalism is in a state of flux and conflict:

the blurring of public and private sector occupations, ...and overlap between management and practitioner activities, suggests that traditional attempts to define professionalism, removed from the context of its practice, offers limited insight to its meaning. (p. 3)

The limited literature to date on BCR’s assault on the gates of professionalism (in the UK at least) risks being confused, and appears to follow a simple syllogistic fallacy, as follows:

1. Established professions are complex, knowledge-based jobs requiring considerable training.
2. BC managers do complex, knowledge-based jobs with considerable training.
3. Therefore, BC is a profession.

Borodzicz and Gibson (2006, p. 181) noted parallels between security practitioners’ tasks and business continuity and that the two-disciplines’ claim to professionalism is similar. However, the overly simplistic criteria problem in both their cases is illustrated as follows. In support of his assertion that security management is a profession, Simonsen (1996, p. 229) was captivated by a very convenient argument proposed by

Criscouli (1988, pp. 498-499) whose essay he described as 'thoughtful'. Criscouli had observed that:

Security can be considered a profession because it requires advanced training of a mental rather than manual nature...security...involves a complex body of knowledge, analytical abilities...as well as the effective use of an array of other managerial skills.

This liberal definition might well be rejected by the reasonable person as being descriptive of almost any managerial role; by this definition a croupier, a bookmaker or an estate agent would be instantly professionalised. Simonsen's criteria, too, must be questioned closely as many might seek to utilise them in the justification of professionalism. A précis of Simonsen's list (*ibid.*) is outlined below.

1. Defined standards and a code of ethics.
2. An established knowledge base including professional journals.
3. Recognised association(s) as a forum for discussion and development of the profession.
4. A measurable set of competencies along with appropriate certification programmes.
5. An educational discipline preparing the student in the profession's specific functions and philosophies.

The BCI appear to believe that all these elements are in place and, *de facto*, BCR is a profession. However, the BCI would not be impressed by the cynicism of Perkin (1989, p. 6) who noted, perhaps a little harshly, that the professions

...live by persuasion and propaganda...claiming that their particular service is indispensable to the client...By this means they hope to raise their status and through it their income...With luck and persistence they may turn the human capital they acquire into material wealth.

Therefore, does the evidence presented for the professionalism of resilience management amount to little more than a propagandist syllogistic trap or is it logically sound, worthy of accompanying high grade literature? As 'Professionalism' is,

according to Perkins, (1989) a potentially valuable notion, any such claim should be comprehensively proven, and the onus of proof should be on the person or group making the assertion to prove it to an unbiased audience. As Jones and de Villiers (2009, p. 209) noted, as a principle 'no man should be judge in his own cause'. Thus, the industry cannot judge itself; the industry can only present its case for professionalism. With a neat paradox, this in large measure evidenced by the quality of the literature that informs its practice.

Are BCR managers inherently professional?

Lindstedt (2007, p. 198) noted in relation to business continuity planning that "At the most fundamental level, a profession that is not well defined cannot ultimately prosper". His implication being that BC practice was too 'blurred' with the complimentary activities of IT and disaster recovery, at present, to be a distinct profession. This sentiment was echoed by a study by EDUCAUSE (2007, p. 155), cited by Lindstedt. It noted that:

BC continues to be...a back engineered process whose technical aspects are left to IT and whose business aspects are only investigated after the fact. Once...attention is brought to bear on BC questions...uncoordinated action, unclear funding and ambiguous 'ownership' of BC are ready to flourish.

Whilst this latter quotation is from the US it has applicability in the UK too. With the broadening of business continuity into the supposed paradigm of resilience, it is genuinely difficult to find significant academic or economic endorsement of BC professionalism.

However, writing on security management, Borodzicz and Gibson (2006) listed many roles which are also believed to be in the remit of the business continuity manager. (They are highlighted in bold by the author.)

A rapidly growing industry of practitioners involved in a number of diverse tasks ranging from the management of situational crime through crisis management, consequence management, business continuity management, resilience management,

internal audit, health and safety functions to insurance, counter-terrorism, kidnap and rescue, private information brokering, security consultancy, and the increasingly critical cyber security and protection of critical infrastructure. (p. 181)

Notwithstanding the bewildering array of responsibilities, Borodzicz and Gibson concluded that the diversity of tasks did not in itself professionalise security nor, potentially by implication, in this case, business continuity. It was found to be “like any other management issue...about the management of finite resources in the face of an infinite range of threats” (ibid. 194). This begs several questions. If professionalism is not about a complex job that not everyone could do, if it is not all about the education and qualifications required, if it is not about dealing with an array of issues with a Brobdingnagian skill set, then what is left?

So, on what criteria should the BCR discipline be reasonably deemed to be professional? Based loosely on the academic references cited, a non-exclusive list similar to McGee’s (2006, p. 101), might include:

- The degree to which the discipline is knowledge based, amenable to study and codification (Evetts et al., 2006).
- The evidence for a professional project taking place (Larson, 1977).
- The identification of an ethical stance and internal disciplinary processes (Brown and Ferrill (2009) citing Reynolds (1994)).
- The degree to which cognitive commonality has occurred (Larson, 1977, p. 40).
- The use of criteria developed for the assessment of other related professions (McGee, 2006, p. 101).

These criteria will now be utilised to examine the evidence for the professionalism of BCR.

The degree to which the discipline is knowledge based, amenable to study and codification.

Almost axiomatically the Business Continuity Institute, (BCI), is the main influence on BC in the UK. If we analyse the BCI website, (BCI. 2018) we can see that roughly speaking the following is the suggested programme of training for a novice. BCI

training commences with the category of '*Entry level Business Continuity Management Training*' described as:

This comprehensive programme of training covers the complete Business Continuity Management (BCM) Lifecycle in depth and is our top recommendation for candidates preparing for the BCI Certificate Examination.

It should be noted that this course is described as 'comprehensive' and 'in depth'. The course normally lasts five days but is also offered in a three-day intensive version, or 32 hours of flexible learning over eight weeks. Potentially, and not compulsorily, this is followed by a total of 13 more days of optional varied training in different skills ranging from business impact analysis to plan writing, and then an optional 30-week distance learning module of 3-4 hours a week taught at Bucks New University, then possibly an MSc at the same location. However, none of it is compulsory and many very competent BC managers known to the author are unqualified in the terms of the BCI's courses.

Even with a charitable, pro-professional view of business continuity, it is difficult to deem this sufficient evidence of professional training akin to law, medicine, dentistry or engineering, in which a range of well-established qualifications define competency to practice. However, echoing Evett et al. (2006), the traditional endorsement of professionalism in the UK still tends to stem from and be based on tertiary education. It is hard to recall any profession which does not mandate some form of tertiary education, even if only a conversion diploma from a prior degree (as required by the legal profession). The growing professionalism achieved by business continuity can be identified by the rapid growth of university-accredited degree courses available (Barclay Simpson, 2017). Whilst some distinctions and emphases in the titles of the courses blur the issue, the thrust of risk (howsoever defined) and business continuity shines through. Importantly, employers are apparently valuing the degrees offered. The list below is taken from Barclay Simpson (2017), which is one of the largest recruiters and placement agencies in this and related fields. They place considerable credence on the degree qualifications in obtaining employment:

There are now many universities that offer post graduate diplomas, BSc and MSc courses in disaster, emergency management and business continuity including Coventry, Birmingham, Leicester, Portsmouth, Cranfield, Hertfordshire, Leeds and others. Many of the courses will give the option of studying full-time, part-time or remotely. This level of education will in some cases give you the advantage and many employers will value your commitment to personal development.

Nonetheless, one needs to be mindful that despite Bucks New University offering an MSc in 'Organisational Resilience', by distance learning, their publicity material (Bucks.ac.uk, 2018) reveals the genuine difficulty they appear to have in precisely defining the topic:

Organisational resilience requires, because of the growing inter-relationship and blurred boundaries between the various elements, and the constant development of new risks and the need to mitigate them; the development of organisational and individual capability and knowledge across a range of contributing areas and of the organisational behaviours needed to support them. Therefore, this programme is designed to attract and educate those with a specialist interest in the following areas and sub-disciplines:

- security
- business continuity
- crisis and incident management
- emergency management
- disaster response and recovery

This is very interesting, as it places BC as a subset of the dominant paradigm of resilience; yet the summary has evident difficulty in defining resilience and resorts to inclusion of references to the five "sub-disciplines".

It is beguiling to endorse professionalism on the basis of burgeoning academic tuition, but one must bear in mind that there are several university courses that would not, in the view of the reasonable commuter, necessarily convey professional status.

It would be foolishly arrogant to equate business continuity ability with academic qualifications. Nevertheless, as a coarse guide to employers, the degree of personal competence that could be expected of a graduate remains a persistent theme. Few organisations would entrust the portfolio of responsibilities outlined by Borodzicz and Gibson (ibid.) to any but the most evidently qualified and competent employee. However, sadly but understandably, perhaps as this might “unintentionally discriminate against some members”, the BCI does not hold records of academic achievements of their membership. Personal communication to the author Patrick Alcantara 31/02/18 . Similarly, Barclay Simpson does not hold data on the percentage of graduates amongst their applicants (personal communications to the author). The evidence thus presented is arguably inconclusive to the reasonable person in that the discipline offers degree courses, but, critically, they are not yet a pre-requisite for practitioners.

The evidence for a professional project taking place

Wilensky cited by Larson M S (1977, p. 31) commenting on the quality of the body of knowledge required of a profession, noted that:

If the technical base of an occupation consists of a vocabulary that sounds familiar to everyone...or if the base is scientific, but so narrow that it can be learned as a set of rules by most people, then the occupation will have difficulty claiming a monopoly of skill or even a roughly exclusive jurisdiction. (p. 31)

Based on this observation, the activities of the BCI and other bodies of knowledge on business continuity might not, by themselves, clear Wilensky's hurdle. Even combined with ISO standards and self-help books they seem to fall considerably short of the level of professional. Paradoxically, most of the BC materials presented by the BCI and others are intentionally amenable, designed to be easy reading and capable of implementation with minimal special vocabulary (other than numerous three and four-letter acronyms. As to any 'scientific' basis, it seems regrettably elusive (Boin, 2006). Whilst perhaps failing the Wilensky criteria, the BCI is evidently committed to achieving protectionism from an open market with no barriers to entry, the same issues that

Larson (1977) intimated as being the intent or aim of becoming a profession, the professional project.

The BCI established itself as a membership organisation in 1994 and has recently developed a training organisation to train applicants in business continuity. This makes the BCI demonstrably different to their equivalents like the British Medical Association (BMA), the General Medical Council (GMC), the Bar Council or the Law Society. The main distinguishing feature is that none of the latter train their members in their disciplines which is the preserve of teaching hospitals, universities and law schools. In contrast, the BCI and their 'approved affiliates' have set themselves up as both the authors of content and process and the approved deliverers of training. In some ways, this virtually makes the BCI a training company for a discipline. It remains to be seen if this duality of purpose will lead to a conflict of interest or will actively promote the professionalism project. The concept of the representative membership organisation training and examining its own members is unusual for a profession and the lack of independent third-party validation might prove problematic in the medium to long term.

The BCI has also devised a variety of membership grades which one might feel at first glance to be complex rather than helpful. However, it is certainly evidence of the exclusivity and protectionism requisite to an embryonic profession, even if some of it is slightly propagandist in Perkins' (1989) terms:

Statutory membership of the BCI provides internationally recognised status and demonstrates the member's competence to carry out BCM to a consistently high standard. Increasingly employers ask for BCI membership when employing new business continuity staff and throughout the world major companies, when issuing tender documents for business continuity consultancy and services, insist on BCI membership.

The Statutory Professional Grades of Fellow (FBCI), Member (MBCI), Associate Member (AMBCI) and Specialist (SBCI) are certified grades and members within these grades have undergone a rigorous application process allowing them to use the relevant post nominal designation.

Even though the BCI membership and other grades require considerable ‘time served’ and evidence of skills in all aspects of BC, it is only with a leap of charitable interpretation that one can grant the term professional to such basic training even when augmented by experience (which could be with a single employer), but it does seem reasonable to concede that the BCI’s ‘professional project’ is well and truly underway.

The identification of an ethical stance

Brown and Ferrill (2009), citing Reynolds (1994), stressed the altruistic element of professionalism and the nature of service creating the perception of professionalism in the mind of the public.

This element, so clearly evident in the medical professions, does seem to have been addressed by the BCI’s code of conduct, the preamble of which is outlined below (BCI 2018):

The wider role of the BCI and the BCI Partnership is to promote the highest standards of professional competence and commercial ethics in the provision and maintenance of business continuity planning and services.

In the accompanying code of conduct, the BCI reserves the right to withdraw membership status for serious breaches of the code and thus has similar powers to the more recognised professional bodies. According to a BCI spokesperson (personal communication to the author 11.09.12) the process has been invoked ‘a couple of times’ since its inception; so it can be seen that the process is not a toothless tiger, although this does not seem a very frequently imposed sanction.

The ethical stance of the BCI is not as developed perhaps as the caring professions, but the self-regulatory element is undoubtedly present. Although the Code of Conduct uses the words ‘profession(al)’ 21 times, the extent of the BCI codes seems to be no more ethical than that which might reasonably be expected of any qualified trade. It seems to lack the detailed debate and high ethics often seen in other professions. It is too convenient to allege that such altruistic ethics are not required of BC managers because they are not taking decisions about life and death or the curtailment of

personal liberty. In reality, their plans might be the basis of such decisions, if not for the managers themselves then at least for their organisations. Consequently, the codes of conduct might warrant some reinforcement if they are to be considered truly professional.

The degree to which cognitive commonality has occurred

Larson's (1977, p. 40) pre-condition that "Cognitive commonality, however minimal, is indispensable if professionals are to coalesce into an effective group", should be vital evidence in the identification of emergent professionalism. Evidence for this cognitive commonality, if not quite coalescence, can be found in several surprising sources: standards, self-help books and social media debates.

ISO standards can be seen as relatively neutral in terms of authorship, albeit implemented commercially by audit firms. The codification inherent in ISO standards and the self-evident commonality is *prima facie* a compelling argument for professionalism. BS 25999 and ISO 22301 standards could be seen as evidence of cognitive commonality. The concentration of attention has to be on the new ISO, which inherits the mantle of the original BS 25999 that was withdrawn on 1st November 2012. This 22-page document, ISO 22301 (2012, p. v) 'specifies requirements for setting up and managing an effective Business Continuity Management System (BCMS)'. It uses the word "effective", which seems to imply some guarantee that, if followed, the resultant plan will be effective. It seems safer to assume that the management system has the efficacy, not the resultant plans whose format, content and actions remain largely at the behest of the organisation concerned. This is an important topic which will be revisited later.

Although ISO 22301 (2012) para 8.4.4 is the only paragraph (approximately one page of bullet points of points for inclusion in plans) relating directly to 'Business Continuity Plans', several other sections, for example section 8.4 and 8.4.2, the 'incident response structure', might be thought by many plan authors as belonging in the plan. However, the advice or, in fact, auditable components are expressed in a general fashion, for example: para 8.4.1 (c) 'be flexible to respond to unanticipated threats and changing internal and external conditions'. It is difficult to see how this could be easily evidenced in any plan. All the advice is sensibly pragmatic and, in many ways,

curiously obvious, but it does not explain how to write a plan nor how it is best presented, etc. It could, therefore, be debateable how this professionalises the industry when the all-important end result, noted by Elliott and Johnson (2010), the plan, receives so little detailed attention from the standard. However, it can be argued that the ISO is merely an auditable standard and we should search elsewhere for cognitive commonality and coalescence. Additionally, nowhere in the standard is any recognition of Kay's notion of Obliquity (2011) (First authored two years before the ISO) The idea that the standard recognises the need for some 'judgement and knowledge of context', p.67. in the case of a 'complex problem' remains unaddressed in the standard.

Software and the detailed examination of programmes offered to BCR planners were excluded in the limitations to the study. So far as the author knows, software has never been used as a criterion for cognitive commonality let alone professionalism. However, the growing number of software BC planning tools, most of them adhering to a common framework, are based on BCI best practice guidelines and ISO standards. It is at least indicative of the standardisation of knowledge. The growing range of software and templates available to assist the author of business continuity plans is, however, plagued with exaggerated claims, 'one size fits all' advertisements and much of the advice and content is merely regurgitated procedures that once resided in paper manuals. Offers of self-completion templates range from a very socially-responsible template offered by Walsall City Council (2018) to 'Express BCP' (2018), a commercial company offering a programme that offers a "Zero risk, 100% satisfaction guarantee", and the facility to "create a business continuity plan in less than one day!".

Thus, it can be seen that the planning process is becoming 'productised' with greater or lesser degrees of assurances by the vendors. Whilst any profession suffers its share of 'hype', at least some of the better software programmes do encourage a systematic approach which could be deemed to enhance proficiency or competence. Yet again, that which seems to professionalise the approach to BC does not of itself professionalise the outcomes. The content of the plans remains in the control of the author, and it is the content that matters and which still cannot be guaranteed.

Combine available, even free software, with good old-fashioned books on the topic and a professional project looks more coherent. Such 'self-help' manuals range from the all-encompassing and precisely titled *Definitive Handbook of Business Continuity Management* (Hiles, 2010) to the inadvertently patronizingly titled, but well intentioned and informative, *Business Continuity for Dummies*, published by the Cabinet Office (Stirling et al., 2012). Almost all such manuals offer advice templates and diagrams for the plan authors use, often on a CD or web links. Constructive as this seems to the cognitive commonality ideal, it has significant drawbacks. The internet lists several instances of lay people landing aircraft in emergencies², and in purely technical terms an average person might, in an emergency, conduct an appendectomy following the instructions in a book of home medicine, but neither emergency pilot or operative would ever be considered professional. The problem is that the simple formulaic reproduction of a set of 'recipes' for business continuity as outlined in such books and software arguably demonstrates the antithesis of professionalism. The professional understands more than the simple procedures repeated on the basis of instructions. Thus, these sorts of publications militate against BC being deemed professionalism. Lord Steyn and any 'reasonable commuter' might question the professional status of their doctor if he or she reached for the 'Diagnosing for Dummies' book when examining them. However, the fact that these books have been authored does in fact demonstrate growing professionalism by their authors if not their readers. Whilst inconclusive in terms of evidence, another grain is tipped into the balance for professionalism.

Any assessment of professionalism using social media is error prone, but it could be indicative of professional status. The 4,166 'resilience interest groups' 'hits' and the 3,531 'business continuity interest group' 'hits' on LinkedIn (sample date 12-01-18) bodes well for the future of the discipline in terms of sheer interest and volume. However, the plethora of BC LinkedIn debates on a raft of definitions, terms and processes, some mundane, others important, reveals a lack of cognitive commonality. So many disparate groups and commentaries are paradoxically evidence of an anarchic babel, not cognitive coalescence; to be professional, some rationalisation has to occur.

The BCI makes a highly debateable claim to thought leadership (it being one of their website banners); it also publicises white papers and case studies. The content of the articles and frequency reveals both a concentration on surveys and, possibly, an inevitable commercial taint, with many articles being placed by major companies and consultancies. These can be prone to being seen as thinly veiled marketing to the readership, a charge that the BCI is apparently well known for avoiding with every attempt being made at editorial fairness and balance. The simple fact is they have to publish available material and, in the absence of peer review and strict academic criteria, then commercialism will occur despite attempts to minimise it. In summary, these endeavours appear to endorse the evidence for the professional project but not the achievement of professionalism.

This section of the debate has been artificially divided into discrete parcels to aid the analysis of what constitutes reasonable proof. In doing so it has perhaps avoided what could be termed the cumulative weight or synergy that the various endeavours generate. When this synergy is taken into account, then the case for cognitive commonality becomes far stronger and the rationalisation of the body of knowledge underpinning BC activities is far more robust. We should recall that Larson (1977, p. 40) was suggesting that the coalescence and cognitive commonality is a precursor of professionalism, not its result. Therefore, in summary, the cumulative evidence suggests only that the process is underway but is incomplete.

Criteria identified for other related professions

McGee (2006, p. 101), writing on the degree of professionalism in the security industry, identified five stages through which the progress of a professional project can be measured. These criteria seem more appropriate than Simonsen's. They do not have the binary compulsion of Simonsen's list, outlined previously, and appear more fluid and amenable to gradation. This is important as the professional project is not often at a defined point. The criteria are:

1. Engaging in collective dialogue to establish shared will and consensus regarding the professional project.
2. Developing the capacity for occupational negotiation.
3. Defining the profession's boundaries.

4. Instituting the boundaries through professional qualification.
5. Creating a professional monopoly by controlling the supply of professionals.

In the case of BCR, considering all the evidence presented above, it seems more appropriate to judge that asymmetric progress has been made in these areas of the five stages and that no stage is yet 100 per cent complete. Again, the reasonable conclusion is that the professionalism of BC is still in gestation.

Discussion

Despite progress, the BC manager's professional project remains, as Lindstedt (2007) suggested, fragmented across differing disciplines. The results are eclectic but promising, with some good academic degrees emerging. Although progress is asymmetric when considered against the criteria above, it nevertheless remains progress. One must remain mindful of timescales. The BCI was formed in 1994. Professionalism projects tend to move slowly, even glacially. The advances made in a short timeframe are considerable and worthy of praise.

Nevertheless, a curious question seems to have arisen. It is perhaps more germane than might first appear. The 'professional project' clearly exists but it is less clear whom it intends to convince. As observed earlier, professions are such because the external observer considers them as such, not because the practitioners believe it to be so. All the recognised professions are acutely aware that anything bringing them into disrepute with the public jeopardises their status (Veloski et al., 2005). In the case of the BCI's efforts, the focus seems more internalised. They appear to be trying to convince themselves and their membership, as opposed to the wider professional or broader public community. It would be a non-sequitur to consider oneself professional if this was not recognised externally. However, the degree to which the BC manager is public facing is usually negligible and therefore the internalisation of the effort is understandable. Perhaps the measure of professionalism is more towards the acceptance that the BC manager is equal in merit, contribution and status to other more traditional departmental heads, such as finance, HR, IT, etc.

That the BCI, the ISO and other bodies have doubtless done much to improve the competence and proficiency of their members is indisputable, but their publications and courses, like anyone else's, can only do so much. The Good Practice Guidelines

can be followed, the Business Continuity Management System can be audited, using ISO 22301 without non-conformances, yet the resultant plan can still be of dubious utility.

This recurrent theme is that the quality of the plans, and therefore the ultimate professionalism of the BC manager, is not vouchsafed by any of the endeavours to professionalise the BC management process. This idea was anticipated by Larson (1977, p. 41). Larson observed that:

However standardised, knowledge is applied by individual professional producers; it is therefore inseparable from the cognitive makeup and whole personality of these individuals.

In other words, it does not really matter how professional the discipline is seen to be, the acid test is how professional are the individuals practising the discipline. It is this critical point that now moves the debate away from professionalism, competency or proficiency of the process of BCR. It directs us to the 'elephant in the room' issue. Even if professionalised, now or in due course, the application of standardised knowledge would still be differentially applied by 'producers' of plans. Thus, the question as to the professionalism of 'planner of the plans' is left unanswered but acknowledged by this debate.

This idea of professionalism being practically assessed in action, at least in terms of the quality of the eventual plan (as opposed to being created a priori by the management process), is echoed by Brown and Ferrill (2009) who were commenting on the developing professionalism of pharmacy students.

It does not matter how much a student knows about professionalism. What is important is how well a student performs as a professional. The usefulness of an organized taxonomy of professionalism depends on having developmental objectives that relate to performance in a professional setting. (p. 56)

In other words, can the BCR manager author a good, 'professional' plan using the training, the materials and advice available, or are other factors at work beyond the

scope of professionalism? It appears that the concentration of effort has focused, so far, (echoing Perrow's ideas) on that which is easier to professionalise, the management process, and has until recently neglected the critical professionalisation of the practitioners.

So, it appears, given the evidence presented against the criteria offered, that BC/Resilience is not yet a profession and, in many respects, does not deserve to become one, yet. Consequently, the literature, its standards and level of authority seems to be appropriate for the discipline in its current guise. Whilst it might be disappointing that the specific applicable BCR literature is not of better quality, it is understandable given the relative youth of the discipline. The next chapter offers some encouraging options if the standard of literature and consequent professionalisation of resilience is to evolve.

Chapter 9 Conclusion

Summary of the findings

The 'plight of the planner' remains that authoritative, referenced, well-written and applicable work is rare. The pure seminal academic literature is remote from most practitioners. Only highly diluted references and summaries permeate the osmotic membrane and appear fleetingly in some ISO standards. Complementary academic literature is often oblique to the practical business of plan authorship. For example, the work of Tversky & Kahneman, Lopes, de Bono and Morgan is fascinating but intensely difficult to utilise and apply in a plan. Other academic work, for example Smart and Vertinsky (2006), is a model of explanation, but challenging to apply in a plan. The excellent ideas of Janis paradoxically challenge boards of directors and their own self-perception. The relevance of many case studies and the advocacy of Toft and Reynolds for cross-sector learning is limited in appeal when many companies still do not identify easily with lessons from large scale disasters. The work of Heath (1997) and Lindstedt (2007) who observed that, 'Continuity plans should not be a manifold of individual threat-based responses' p.201, on the brevity of generic planning is largely un-regarded when planners are under pressure from auditors for comprehensive plans.

The attempts of academics to reach out to practitioners in works as authored by Reason and AIRMIC (2011) stand out as being worthy of emulation, however, working with commercial organisations to achieve this aim can result in confused articles, such as Denyer (2017). In this case the uneasy partnership between the BSI and Cranfield led to an over-referenced article which proposed a model as opposed to offering evidence for the efficacy of resilience. The BSI and the ISOs are arguably so poor in standards of publications that iterative criticism or review at this stage seems superfluous. Unless significant review of the standard of standards is undertaken the growing bureaucratic burden of substantially similar standards risks alienating the market.

Her Majesty's Government's advice remains useful and well considered. There is some informal suggestion that it suffers from 'delay' in that its advice is subject to too

much scrutiny prior to publication so that it inevitably lags behind the curve of progress. This is an ill-founded critique as evidenced by the Home Office (1999 and 1996) advice which predates many later initiatives, including the proposal of a broader 'resilience church'. If there is a criticism it is the apparent lack of empathy shown to micro, small and medium sized enterprises, which comprise more than 99% of the business in the UK; they are not motivated to devote scarce resource into activities that in all likelihood will never occur. However, one can perceive that this has been addressed in great measure by the increasingly detailed advice given on BCR by local authorities' websites in discharging their obligations under the Civil Contingencies Act and, following the strategic defence review, the publication of the *Dummies Guide*, Sterling et al (2012).

Self-help and advisory books and manuals are undoubtedly useful to the planner. The content of such books has suffered from the lack of any serious academic investigation and validation. This has led to the iterative similarity of presentation and process that was commented upon and analysed comparatively in tabular format earlier in this work. The quality of the books varies from the badly written but comprehensive guide by Graham and Kaye (2006), to the really very basic *Dummies Guide* and the questionable validity of the *Good Practice Guide*. Nothing will ever control the supply of the self-help books and nothing other than the origins of the author will affect the quality of the content. Perhaps the durability of Heath (1997) makes his work one of the best of this genre, and his referenced works could be usefully emulated by subsequent authors.

A consensus view amongst my colleagues is that the BCI is probably the main influence on planners. Sadly, since commencing authorship of this work little appears to have altered in the BCI. The most recent BCI 'White Paper', '*Resilience Is Your Competitive Advantage*', was launched on 12th January 2018. The pertinent content was only five pages; it was entirely self-referenced to previous BCI studies or articles and offered no metrics of what the 'competitive advantage' might be. Claims in the 'grey' literature thus continue to lack authority, and commercial and industry association research is of poor quality. The remainder of the chapter offers some potential solutions to improve the literature in the medium term. Such a potential

improvement would be welcome, irrespective of the perception of the degree of professionalism inherent in BCR practice.

Such a potential improvement also has to deal with the predilection for theory building and the lack of any quantitative studies that might validate practice and build a paradigm, as noted by Smith and Elliott (2006), Pauchant and Douville (1992), Boin (2006) and Alexander (2013). One might have presumed that, when viewed in its entirety, a methodological 'balance' would be found between the varying approaches or positions of literature and research. However, based on Patel's (2015) comprehensive table to illustrate the 'position' of research, the BCR world seems content never to stray into quantitative positivism, a view endorsed by Boin (2006). Whilst this study notes some academic research complementary to BCR is quantitative, e.g. Knight and Pretty (1997), most research specific to BCR tends towards qualitative and loosely interpretivist studies. The research conducted by companies and/or the BCI is often poorly conducted pragmatism, such as Denyer (2017). Yet paradoxically, the BC management process expressed by the BCI and ISOs has a resolutely positivist ontological air in that it is perceived to be the sole reality and is inviolate. It is perhaps this academic imbalance that is the catalyst for hyperbolic claims and illogical defence of the status quo that generates such inertia in the development of the discipline.

Notwithstanding all the criticism and current lack of professional attainment, the discipline remains a cognate area with its own identity; there exists a broad systemic similarity between BCR responses, albeit their causes differ significantly. Were this not to be the case, all of Toft and Reynolds' work, together with much of Turner's, Reason's and Perrow's, would have little basis for broad corporate application. It is, therefore, possible to develop doctrines and principles to inform its behaviours, but this remains an area to be developed.

Implications of the findings

By implication, therefore, the utopian vision is that academics will also write for the trade press, not just peer-reviewed journals, and that research attention will be diverted from the qualitative views or opinions of practitioners to quantitative evaluation of the BCMS process (Boin, 2006). The reality appears to be that any criticism of BCR, its educative process, its attainment of professionalism, its value, its

standards and its relevance is so counter to the vested interests of practitioners, consultants and trade bodies that it is quickly swept under the carpet. As the dominant representative body, the BCI, which should be leading resilience thinking, appears to suffer from a duality of purpose. It states that it is a “membership and certifying body of choice...for professionals” (*‘Resilience is your competitive advantage’*, BCI, 2017, a.). Realistically, it needs to determine if being both a representative body for the whole industry or a commercial enterprise that dabbles in certifying practitioners and thought leadership is compatible. It is simply not behaving as a ‘professional’ membership organisation arguably should. If it desires professional status, it might emulate the British Medical Association (BMA) which represents Doctors’ interests but does not train them or qualify them. Furthermore, the thought leadership in their publication, the Lancet (an international peer-reviewed general medical journal owned by Elsevier) is led by practitioners not by retained researchers reflecting commercial partners’ interests. Irrespective of any decision on the matter, the BCI’s commercial taint with sponsors needs to be eradicated or plainly stated as might be applicable. Its research process should be tightened and improved, as advocated by Minger (2000). It should call on a wider range of authors and permit contrasting views that challenge orthodoxy (Damer, 2009). Very simply, tighter discipline and editorial scrutiny are required if the fear mongering ‘paradoxers’ whom Sagan (1974) despised are to be eradicated.

Recommendations

Up to this point the debate has focused on the quality and utility of the literature that is likely to have been applied to the planning process by BCR practitioners. The debate now considers literature which is seldom applied to BCR, but which has both academic credibility and pertinence. This primarily deals with the potentially abstracted lessons that military doctrine might have for the development of professional BCR practice. It must be stressed that the author is not advocating taking unfiltered military doctrine and steamrolling it into practice. The materials selected are more illustrative of a style and tone of literature that might bridge the academic/practitioner chasm. Such work might lay a sound doctrinal foundation for BCR that would stand the test of time and pave the way for professionalism. Again, it is caveated that BCR is not a military operation, but that similarities exist in planning terms. This is most especially evident at the doctrinal and principle levels of both activities, which is perhaps the start point of a paradigm for BCR.

It is surprising to find that military doctrines, derived from military history, which axiomatically deal with crisis and contingencies, have, aside from some very brief references by Quarantelli (1996), Lengnick-Hall, Beck, & Lengnick-Hall (2011, p. 247) and Reason (1997), been disregarded in BCR. Perhaps the greatest expenditure by any single national organisation on any resilience planning is conducted by the military. World Bank Group (2017) and UK Public Spending (2017) reports estimate it to be approximately 2% of UK GDP or around £44 BN per annum respectively. It should also be borne in mind that the UK military has centuries of experience, has 'played' for the highest of all stakes, national sovereignty and lives, and the development of coherent military doctrine and planning pre-dates BCR by centuries.

The MOD 'regiments' the British Army's four main functions as to "Protect the UK, Prevent Conflict, Deal with Disaster, Fight the Nation's Enemies". (ARMY BE THE BEST, 2018). Like most military forces, they often perform a variety of functions in unpredictable situations to which they must respond rapidly. Therefore, it seems prudent to examine the principles and characteristics of military doctrine to identify any lessons for corporate BCR models. Potentially the lessons learned by the military over centuries might have considerable benefits for BCR planning, because the armed forces have two features denied to corporate entities. The first is a longer 'corporate memory' from traditions and practices built up over time. The second is the luxury of being able to debate and develop theory and to practice it for its own sake in their long-established staff colleges.

Furthermore, military history and resultant doctrines maintain relevance today and the older texts that are cited still retain their currency. For example, Camon (1907) writing on the Napoleonic wars of the early 1800s is still relevant today. Frederick the Great's (1747) work on *'Military Instructions for the Generals'* is still applicable to modern circumstances. The US General Patton noted the value of historical analysis in respect of an operation in 1943. He commented that a previous invasion of the island of Sicily had "many points in common with our operations" (p. 283). He referred to an account authored some 900 years previously (Blumenson, 1974). A more current example is taken from Abratov (2000): "The conflicts in Kosovo and Chechnya deserve careful study as models for the conduct of future wars and for insights on how to prevent them." (un-numbered Abstract). He cited this as being influential on the recent

transformation of Russian military doctrine.

The reason for the dearth of discussion of military literature hitherto in this work is simply that, at least in the author's experience, it has not been seen to influence the planning process. However, there have been studies which have paralleled the idea of establishing principles. Norris et al. (2008, p. 143) described, very gently, their five 'principles' thus:

...we describe five stops along this road that are likely to be necessary for most travellers, although other stops undoubtedly could be made as well. First, to increase their resilience to disaster,...Fifth, communities must plan, but they must also plan for not having a plan; this means that...

Quarantelli (1996) made a far more concrete link to principles and the military version of them. However, he was imprecise in distinguishing principles from strategy and tactics:

This the military considers the province of tactics. Thus, if we think in parallel terms, we can equate good disaster preparedness planning with the best strategy that could be followed in readying a community for a sudden disaster, while good managing involves the use of the best tactics for handling the specific contingencies that surface in the emergency time of a particular disaster. (p. 3)

However, just as the military finds it possible to discuss tactical principles, disaster researchers can point to some tactical considerations that are involved in efficient and effective disaster management. (p. 5)

Notwithstanding the slight imprecisions of terminology (some principles, notably 2 and 3, are actually tasks), Quarantelli's list, albeit in the field of disaster management, is a commendable, if neglected, start point:

- (1) correctly recognizing differences between response and agent generated demands;
- (2) adequately carrying out generic functions;
- (3) effectively mobilizing personnel and resources;
- (4) generating an

appropriate delegation of tasks and a division of labor; (5) adequately processing information; (6) properly exercising decision making; (7) developing over all coordination; (8) blending emergent and established organisational behaviors; (9) providing appropriate reports for the news media; and (10) having a well functioning emergency operations center. (p. 5)

However, the inclusion of such military parallels at this stage depends on three pivotal notions being considered. Without them being addressed, the idea of military literature being a template of abstraction for BCR literature is questionable. The first notion is that the ideal literature to inform BCR planners is a suitable blend of the practical and theoretical; this is similar to military doctrine pamphlets. Secondly, is the idea that, like military history, the simple purpose of study and the analysis of the past, even the distant past, is only valid if it can convey insight into current practice and/or the education of the BCR practitioners' minds (this is already evident to some extent in some case study analysis, e.g. Clark (2014)). The third is the establishment of compelling parallels between the respective activities of military and BCR planners. These are issues addressed below:

Morillo with Pavkovic (2017), commenting on Sir John Keegan's academic position on military history (he was a former lecturer at the Royal Military Academy Sandhurst and a visiting Professor at Princeton), noted a readership for whom such histories and literature were a qualification for their job and that 'Professional Military Education' (PME) literature was both technical and practice oriented. Critically, however, PME remains appropriately academically informed but slightly less so than the purely academic treatise. This sounds to be the ideal blend of theory and practice to bridge the academic/practitioner gap alluded to earlier.

Kiszely (2006, p. 13) notes two purposes for the teaching of military history. The first being to offer 'operational history' simply so that soldiers could be "better at their jobs", and the second, endorsing Clausewitz's view, "to educate the minds of the military commander" whilst avoiding straying into "school solutions". Once again, the idea of the past informing current practice is germane to BCR planning.

Most importantly, it must be demonstrated that the characteristics of military

operations and BCR planning are similar. To establish this, two sources are used. The first is the 100-year-old work of Prussian theoretician, von Clausewitz (1976), the second is the British Army Field Manual, BAFM (1985) and its more modern web-based iteration Army Field Manual (2017). (The field manual is a synthesis of accepted current doctrine, compiled by various members of the Army and retained academics.)

Almost 200 years ago, Von Clausewitz (1976, p. 104) observed that, “Four elements make up the climate of war: danger, exertion, uncertainty, and chance.” His choice of elements could equally well describe corporate BCR responses. Perhaps Clausewitz’s most well-known dictum which gave rise to the sound bite phrase the ‘fog of war’ has close empathy with BCR responses made in the realm of uncertainty,

War is the realm of uncertainty; three-quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. (p. 101)

BAFM (1985, p. 29) adds that in some combat situations,

With only a flawed picture of the situation he may have to make his decisions on incomplete information or intelligence, relying on his judgement and a feel for the situation based on experience and knowledge..., the quality the Germans call *fingerspitzengefühl**.

*fingertip feeling or gut feeling

Superficially most contingency or risk management problems sound simple yet their resolution can be enormously complicated. This factor too was commented upon by von Clausewitz thus (p.119):

Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war.

The BAFM (1985, p. 29) suggests that the appropriate response is the development of simple and flexible plans, plans having these qualities being more likely to survive the hazards of war. This resonates with the ideas in BS 11200 and those of many other academic authors. It endorses the requirement of contingency plans to be as

simple as is reasonably possible to improve their robustness in the face of the threat ((Darling, 1994, p. 7), (Boin and McConnell, 2007), (BS 11200, 2014, p. 10), (Regeester, 1987, p. 75), (Smith, 2013, p. 7), (Heath, 1998, p. 261)).

In summary, both battle and crisis management situations are typified by: danger, fear, uncertainty, the operation of chance, and that simple tasks become difficult to perform. Having established clear parallels between the military situation and the BCR response characteristics of a civilian organisation it is worthwhile examining the doctrine and principles that inform the British Army's planning process.

Principles and Doctrine

Interestingly, the Army Doctrine Primer (2011) in defining doctrine in the forward (p.i). offers clear links to three key elements of this thesis, professionalism, knowledge and the primacy of doctrine.

We pride ourselves in being a profession, which by definition has a body of knowledge which it studies, it develops through interaction with it,...doctrine is our military body of knowledge.

The document distinguishes high level doctrine comprising "philosophy and principles", and low-level doctrine encompassing, "practices and procedures" (p. 3 section 1).

The Levels of Doctrine. Higher levels of doctrine establish the philosophy and principles underpinning the approach to military activity. Such doctrine provides a framework of understanding for the employment of the military instrument and a foundation for its practical application. The lower levels of doctrine, which are broader, describe the practices and procedures for that practical application. (Chapter 3, p. 1)

In considering doctrine's centrality to an army, writing in 1926, Fuller (1993) linked sound doctrine to the establishment of effective principles, and the subsequent debate restrains itself to this level of doctrine. Over considerable time and on the basis of extensive research, the British Army has proposed ten 'Principles' of warfare. It is of note that in 33 years between the author being given the BAFM (1985) and 2018 web

version of the Army Field Manual (2017), the only change has been the renaming of ‘administration’ to ‘sustainability’.

It suggests that the principles are useful considerations in the authorship of any military plan. Their application to planning is explained in Army Field Manual (2017):

the Principles of War provide comprehensive considerations at all levels for planning and executing campaigns and operations. They are not absolute or prescriptive, With the exception of the master principle, which is placed first, the relative importance of each may vary according to context. (annex 1A p. 1-11)

They are listed in the BAFM (1985, p. 29) as:

1. Selection and maintenance of the aim
2. Maintenance of morale
3. Offensive action
4. Surprise
- 5 Concentration of force
6. Economy of effort
7. Security
8. Flexibility
9. Co-operation
10. Administration [“Sustainability” in (Army Field Manual, 2017)]

It is not the author’s aim to debate these principles in detail nor to translate them into a definitive and prescriptive set of BCR principles. Some of the categories have a more obvious application to risk and contingency planning than others. However, with a subtle change of emphasis to reflect a civilian orientation, it can be seen that most principles merit consideration in BCR planning. Their relevance in this work is to highlight that BCR does not have a set of established, academically endorsed and uniformly acknowledged principles that inform planning.

Now, it should be noted that some of the ideas debated here are obliquely referenced in ISO 22301 and some other supporting guidance documentation, but they are not offered in the nature of guiding principles. These principles and their interpretation

above are used militarily as mental checklist to inform the planning process. The table 6 below is offered as a prototype illustration of how they might translate into the civilian BCR environment.

Table 2. Military principles and their civilian equivalents.

Military Principles	Possible Civilian equivalent	Outline example of their application.
1. Selection and maintenance of the aim	Setting an appropriate response strategy	Identification of a simple clear strategic aim. This serves to inform all concerned of the overarching intent and allows a focus on what is important to be maintained.
2. Maintenance of morale	Maintaining the passage of information to staff and stakeholders	An effective communications plan with clearly identified stakeholders, understanding of their concerns, an identified predetermined point of contact and a clear 'message' tailored for the recipient group given and updated at an appropriate frequency.
3. Offensive action	Taking decisive prompt action to regain BAU	Ensuring regular reviews of progress to determine that actions have been carried out and are completed.
4. Surprise	The retention of an element of surprise in the recovery phases which can be published with a	Perhaps in a cyber or ransomware event it might be that an element of security, see below is warranted and equally in the 'move' against the extortionist an element of surprise might be an advantage.

	positive angle	
5 Concentration of force	Focus of the essential issues and matters	The BIA should have identified the most critical issues and items for recovery. Focus on these issues.
6. Economy of effort	Effective delegation of tasks	Dependent on the management structure do not fall into the trap of overcontrolling or directing minutiae which should be dealt with by a subordinate team.
7. Security	The ability to maintain a degree of secure operations and confidentially during an incident	Often the issue will not be immediately in the public domain and an element of security is required to maintain this.
8. Flexibility	Maintaining viable alternative response options ⁷	Ensure that some of the response team are working on alternative options and plans so that if the initial plan is frustrated another option is ready and instantly available.
9. Co-operation	Cooperation with emergency services and other regulatory or authoritative agencies	Maintain effective liaison with such units prior to any incident, agree responsibilities and decision-making boundaries as well as PR primacy.

⁷ This seems to have some echoes of Kay's (2011) concepts of Obliquity and the idea of successive limited comparisons of options.

10. Administration	Ensure that plan is supported by effective logistics	Ensure that the plan is not aspirational in that any intent in the plan needs to have been rehearsed in advance and the logistic requirements identified and suitable budgets made for the required resources.
--------------------	--	--

British Military Doctrine Pamphlets

The principles outlined above are essentially ‘what’ the planner should be thinking about in the context of a given situation. The next stage is to examine advice given by the military about ‘how’ to think. Military publications suffer from what might be called the ‘Mainwaring’ syndrome where comedic association with ‘Dad’s Army’ is never far away. It arguably leads to an aversion to utilising the pantheon of military doctrine which inform the Army which is arguably the largest ‘resilience planning’ organisation in the UK. This was noted by Tom and Barrons (2006), who commented (p. xi) “you might not like the military but that should not stop you learning from their mistakes and what they have learned to do right”. This is a shame, as modern UK military pamphlets (somewhat akin to the HMG advice and BSI and BCI documents) are of a quality superior to most other publications. (A point apocryphally noted during WW2 by the German General Rommel in 1940.) It is far beyond the scope of this work to undertake an extensive examination of military publications. Therefore, a single document has been identified with the assistance of a former instructor at the Defence College, who is also familiar with civilian resilience practice. The aim was to identify documentation that was close to some of the topics dealt with by other authors and sources on resilience and which has the potential to make a contribution to the doctrine of BCR.

The document to be considered is Joint Doctrine Note 3/11 (2011) *Decision Making and Problem Solving: Human and Organisational Factors* (2011) MOD Swindon – hereinafter JD3/11 (2011). This document, Joint Doctrine Note 3/11 (2011) is a thin ‘A5’ printed 40-page pamphlet with some short annexes. It was chosen deliberately as it has now been ‘archived’ and is available on web links. It has just been replaced with a slightly more modern version which illustrates the constant updating of doctrine in

the military. The original is contributed to by four academics. Professor Karen Carr, Doctor Peter Tatham and Doctor Teri McConville (all from Cranfield University) and Professor Theo Farrell (from the Department of War Studies at King's College London).

The pamphlet is easy to read (it takes less than one hour); each section has comprehensive references, and some cases studies (both civilian and military) are used to elaborate on points made. It is explained that the work is designed to be read in conjunction with three other complementary guidance manuals. The aim of the guidance is clearly stated in the preface as “to improve our decision making in all complex problem solving”. It seldom references other military documents as authority; the clear majority of references are academic civilian publications. There is no debate of definitions which indicates a ‘cognitive commonality’ of understanding by the readership. Interestingly, the document is self-critical, as opposed to ‘protectionist’, of its own organisation; it references earlier military campaign failures to illustrate the need for improved thinking. The lack of hyperbole is welcome, and it is entirely ‘value-free’. It maintains a ‘light touch’ in terms of academic referencing and a lot of the content is summarised in easy to absorb tables.

In offering some detail to support my contentions, it is most illustrative to ‘clip’ a visual section of the document into the thesis. This might be unconventional, but it avoids referencing conventions that would render an explanation of the ‘clip’ almost unintelligible. (The ‘ARC’ letters are part of the MOD ‘archiving’ process and are indelible.)

Figure 2. Extract from Joint Doctrine Note 3/11 (2011)

106. **Operational Thinking.** Unlike tactical issues, problems at and above the operational level of command tend to be more ill-structured and not amenable to precise or pre-rehearsed solutions.¹¹ Mental and procedural templates for such problems are often ineffective; some problems will be insoluble and their parameters subject to constant change and an unpredictable interplay of myriad actors, chance and friction. Decisive, fast-acting leadership may be appropriate in the initial response to a crisis; snap judgements and first impressions apply to many aspects of problem solving. However, unbounded and ill-structured problems benefit from a more reflective approach that employs adaptive reasoning to exploit the brain's potential.

⁸ Grint K, *Wicked Problems and Clumsy Solutions: The Role of Leadership. The New Public Leadership Challenge*, Editors, Brookes, S and Grint K, Houndmills, New York, Chapter 11, pages 169-186, 2010.

⁹ Klein G, *Sources of Power: How People Make Decisions*, Cambridge MA: MIT Press, 1998.

¹⁰ Gladwell M, *Blink: The Power of Thinking without Thinking*, page 14, Time Warner, 2005.

¹¹ Although complex, tactical problems in general can be addressed by the application of appropriate expertise to generate clear, albeit intricate solutions. We can also rehearse our responses until they are highly effective and efficient.

In summary, the tone, construct and content seem ideal to inform a professional audience and introduce them to new concepts, and the references allow them to explore the topic in more detail if required. The pamphlet has most of the intellectual validity of an academic paper whilst remaining accessible, readable and simple. Essentially, it explains the relevance of the material and its application to operations. The pamphlet is an ideal template, which could be used profitably by the BCI and BSI type of publications.

Discussion

In 1962, Kuhn (1996) proposed that a paradigm was a set of "universally recognized scientific achievements that, for a time, provide model problems and solutions for a community of practitioners" (p. 10). There is considerable doubt as to the power of 'resilience' to fuel a paradigm (Alexander, 2013). Earlier, the absence of a paradigm being the cause or effect of a lack of BCR professionalism was raised. It alluded to this issue being responsible for BCR remaining a discipline. Essentially, one might conclude that BCR is still a discipline without a paradigm, and without a paradigm it can never be professional. The establishment of BCR doctrine, principles and the development of credible informative supporting literature, modelled on some of the military literature examples offered above, might assist in the development of such a paradigm.

It has been demonstrated that the academic literature in isolation is difficult to apply to planning. Most of the BCI and ISO materials are not value-free, and they verge on

straying into becoming 'paradoxers' (Sagan, 1974). Professionalism has not been attained and text books are of variable quality. But, if the BCI, or better still the industry practitioners themselves, wishes to make the practice of BCR professional, then the solution lies in an evolutionary approach to the improvement of the literature that supports BCR resilience. To build a paradigm, as defined by Kuhn (1996), proof of efficacy of BCR processes is required. Fundamentally, this requires extensive quantitative research and there are several areas in the planning process and principles of BCR, which would need tender development in order to practically inform practice. Emulation of the military in first establishing doctrinal principles and then blending academic and practitioner comment is a critical foundation upon which professional literature can be constructed and a paradigm built.

The future

This leaves the question of what can be done to develop such a potential paradigm. Ideally there should be some unification and standardisation of the courses being taught in the universities currently. One might also hope that the BCI could embark of becoming a chartered institute thereby raising barriers to entry and consequent standards of practice. However, at a very personal level one has to be genuinely mindful of one's strengths, weaknesses and practical limitations. Therefore, I have taken my own weaknesses into account and I consider that my contribution will remain focused on the practitioner's plight and that my oral and trade press focused proselytization for a paradigm will reach and be more persuasive to more practitioners than might be the case if my focus remained solely on academic publication. My business experience suggests that a multi-faceted but bounded approach is more likely to succeed in the medium term as opposed to only, or preliminary, academic publication.

The problem can be deconstructed into three issues, the content, the audience (which will determine the degree to which the content is 'academic') and the communication medium. The following table outlines some of the options that are being considered. Please note that, albeit referenced in the table below, the propensity for academic paper publication has been considered and for the time being rejected. This only due to the time pressure on the author and his inability at present to devote sufficient time to the construction of high-quality peer reviewable academic papers. However, a great

deal of preparatory work needs to be undertaken before any communication of any type takes place.

Table 3. Possible development of a paradigm

No	Content	Intended audience/ topic	Format/ Medium/ distribution	Comment/action/responsibility
1	Development of the principles into prose and diagrammatic format with a justification and explanation of each.	Likely to be for practitioner comment	Powerpoint and word Possible to release through BCI or at a BCI conference speech	To be done internally by 5 Needhams staff. Academic overview would be provided by A Wakefield.
2	Deconstruction of specific chapters into publishable trade press articles	Practitioners The issues of professionalism and the notion of the paradigm seem most important	Referenced but not peer reviewed	Mainly author to action.
3	To develop some educative doctrine guides	Practitioners/ Readable in 30 mins to cover significant academic work and their potential application to practice	Referenced but not peer reviewed Web site/ trade press/ BCI	Author and his colleagues
4	Possible use of the 'Conversation' site to outline ideas and engage in formed debate prior to any academic publication	Academic and practitioners	International web hosted debating forum	'The Conversation' is described at the web link below. http://uopnews.port.ac.uk/2018/10/29/writing-for-the-conversation-meet-the-editor/

5	Development of an academic paper on the issue of the absent paradigm	Academic practitioner and	Appropriate journal TBC	Author with support from the university staff if possible and/or co authorship with one of the established academic authorities on the topic.
6	Publication of an essay on Professionalism which was the subject of an earlier module and which was assessed as being virtually publishable in its current format.	Academic practitioner and	Appropriate journal TBC	Author with support from the university staff if possible and/or co authorship with one of the established academic authorities on the topic.

It is hoped that by following this logical and phased approach that the needs of the academic and practitioner communities can be, engaged and developed.

Finally, it has been kindly suggested that, in conclusion, I offer a definition of resilience. I respectfully decline for the following reasons. First, it just adds to an existing, and in many respects from the planner's perspective, frustrating pantheon of definitions of which I have been critical. Second, any definition I offer will be subject to the same degree of debate to which all the other definitions are prone, and this seems less than helpful to the planner. Third, any definition I derive is like to be repetitious and closely akin to those twenty-one definitions already catalogued by Norris (2008). Fourth, based on the remark attributed to Da Vinci, that '*simplicity is the ultimate sophistication*' and furthermore that 'simplicity is a virtue', Comte-Sponville (2001) I would go no further than iterating that 'resilience' is a general noun derived from the Latin, 're', back and 'salire', jump. The definition itself needs to remain this simple so that it can then be validly and differentially applied by the planner who operates in a variety of contexts, locations, and activities. Finally, at risk of last-minute pragmatism, I far prefer the abductive reasoning approach of, if it looks like resilience and

behaves/'walks' like resilience then it probably is resilience and I have no intention of fuelling the propensity for this noun to develop into a verb.

References

1. Source, <http://www.newcareerskills.com/electrical-courses-become-an-electrician.php?gclid=CPvUiN6krbICFYtAodsmkAsQ>
 2. http://articles.cnn.com/2009-04-13/us/florida.plane.emergency_1_controllers-pilot-s-license-plane?_s=PM:US
- Academic literature an overview. (2015) *Academic literature an overview: Undergraduate Key Readings in Business Continuity and Crisis Management* (2015), University of Portsmouth ICJS Published annually Wakefield, A. Editor (Key Readings) University of Portsmouth.
- Adams, J. (1995). *Risk*, London: UCL Press.
- Adler, P. & Kwon, S.W. (2002). Social Capital: Prospects for A New Concept. *Academy of Management Review*. 27. 17-40. 10.5465/AMR.2002.5922314.
- Airmic (2011). *Roads to Ruin, the analysis*. Cass Business School on behalf of Airmic, Lloyds Avenue, London.
- Airmic (2014). *Roads to Resilience- Building dynamic approaches to risk to achieve future success*. Cranfield School of Management on behalf of Airmic Lloyds Avenue, London.
- Alexander, D.E. (2013). *Resilience and disaster risk reduction: an etymological journey*. Institute for Risk and Disaster Reduction, Published in Nat. Hazards Earth Syst. Sci. Discuss University College London, London, UK.
- Ansoff I (1987). *Corporate Strategy*. Revised edition Penguin Books Harmondsworth Middlesex.
- Anderson, C. Blenkinsopp, A. and Armstrong, M. (2004) *Feedback from community pharmacy users on the contribution of community pharmacy to improving the public's health: a systematic review of the peer reviewed and non-peer reviewed literature 1990–2002* <https://doi.org/10.1111/j.1369-7625.2004.00274.x>

Armed Forces (2018). *The definitive listings of UK defence suppliers*. Retrieved from http://www.armedforces.co.uk/armypayscales.php#.WU_7UXTrvIU

Arbatov, A. (2000). The Transformation of Russian Military Doctrine: Lessons Learned from Kosovo and Chechnya." Occasional paper no. 2 GEORGE C MARSHALL CENTER APO AE 09053 EUROPEAN CENTER FOR SECURITY STUDIES Retrieved from: <http://www.dtic.mil/dtic/tr/fulltext/u2/a478927.pdf>JUL 2000

Arms, W.Y. (2002) What Are The Alternatives To Peer Review? Quality Control in Scholarly Publishing on the Web. *Journal of Electronic Publishing* Volume 8, Issue 1: *Adding to the Sum of Accurate Information in the World*, August, 2002 DOI: <http://dx.doi.org/10.3998/3336451.0008.103>

ARMY BE THE BEST (2018). *The British army*. Retrieved from <https://www.army.mod.uk/what-we-do>

Army Doctrine Primer (2011). Army Doctrine Publication, (AC71954) dated May 2011, Development Concepts and Doctrine Centre, Ministry of Defence, Shrivenham Wilshire SN6 8RF. Retrieved from: www.mod.uk/dcdc.

Army Field Manual (2017). Army Doctrine Publication (ADP) Army Doctrine Publication AC 71940 Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/605298/Army_Field_Manual__AFM__A5_Master_ADP_Interactive_Gov_Web.pdf

Arksey, H. and O Malley, L. (2005). Scoping Studies: Towards a Methodological Framework. *Int J Soc ResMethodol* 2005, 8:19-32.

Augustine, N. R. (1995). Managing the Crisis You Tried to Prevent. *Harvard Business Review*, 73(6), 147-158.

BAFM (1985). British Army Field Manual Volume 1 The Fundamentals Part 1 The Application of force 1985. Issued to the Author RMAS.

Barclay Simpson (2017). *Market Report Security and Resilience* Retrieved from, http://www.barclaysimpson.com/content_static/qualifications_in_business_continuity_management.asp

Barnes, P. (1999). In, *The Definitive Handbook of Business Continuity Management* eds A, Hiles and P, Barnes. John Wiley and Sons, Chichester.

Bazerman, M.H. (2006). *Climatic Change* 77: 179. <https://doi.org/10.1007/s10584-006-9058-x>

BCI GPG (2013). *BCI Good Practice Guidelines (2013) Global Edition A Guide to Global Good Practice in Business Continuity*. Bird, L. Editor, BCI Publications Caversham, Reading.

BCI (2017, a.). *Resilience is Your Competitive Advantage*. Business Continuity Institute (BCI) white paper, Caversham, Berkshire.

BCI (2017, b.). *Horizon Scan Report 2017*. Published by the BCI with the support of the BSI Standards Limited. Caversham UK.

BCI (2000). *The Source 2000* Issue 2 ISSN 1353-601X the Business Continuity Yearbook, Continuity Publishing Ltd Manchester.

Business Continuity Institute (2018).. Retrieved from <http://www.thebci.org/>

BCI Supply Chain Resilience Report (2018) <https://www.thebci.org/resource/bci-supply-chain-resilience-report-2018>.

BCM LRSGP. (2014). BCM Legislations, Regulations, Standards and Good Practice, BCI publication January 2014, (Ed) Lyndon Bird. Technical Director, The Business Continuity Institute. Reading.

Bennett, S.A. (2006). *A Sociology of Commercial Flight Crew*. Ashgate Publishing, Aldershot, England.

Berstein, P.L. (1996). *Against the Gods: The Remarkable Story of Risk*. John Wiley and Sons, New York.

Bichou, K., Bell, M., Evans, A. (2007). *Risk Management in Port Operations, Logistics and Supply Chain Security*. London: Informa Law from Routledge, <https://doi.org/10.4324/9781315850504>

Bland, M. (2013). Plans are useless. *Journal of Business Continuity & Emergency Planning*, 7(1), 56-64.

Blumenson, M. (1974). *The Patton Papers*, Vol. II: 1940-1945. Boston: Houghton Mifflin.

BMA (2018). *Payed guidance for salaried GP's*. Retrieved from <https://www.bma.org.uk/advice/employment/pay/general-practitioners-pay>

Boin, A. (2006). Organisations in Crisis: The Emergence of a Research Paradigm. In D. Smith and D Elliott (Eds.), *Key Readings in Crisis Management* (pp 84-96), Abingdon, Oxon, Routledge.

Boin, A., Hart, P. T., McConnell, A. & Preston, T. (2010). *Leadership style, crisis response and blame management: The case of Hurricane Katrina*. Public Administration, 88(3), 706-723.

Boin, A., & McConnell, A. (2007). Preparing for Critical Infrastructure Breakdowns: The Limits of Crisis Management and the Need for Resilience. *Journal of Contingencies and Crisis Management*, 15(1), 50-59.

Boin, A., t'Hart, P., Stern, E. & Sundelius, B. (2005). *The Politics of Crisis Management: Public Leadership under Pressure*. Cambridge: Cambridge University Press.

Borodzicz, E. (2005). *Risk Crisis and Security Management*, Chichester, Wiley.

Borodzicz, E. P. (1999). The Terminology of Dangerous Events: Implications For Key Decision Maker Training, in *International Journal of Police Science and Management* Henry Stewart 1999, 2(3).

Borodzicz, E.P., & Gibson, S.D. (2006). Corporate security education: towards meeting the challenge, *Security Journal*, 19(3), 180-195.

Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method, *Qualitative Research Journal*, vol 9, no 2, pp27-40 DOI 10.3316/QRJ 0902027.

BP (2006). *Integrity Management: Learning from Past Major Industrial Accidents*, Booklet 14, BP, Sunbury on Thames UK.

Brien S, Lorenzetti D, Lewis S, Kennedy J, Ghali W (2010). Overview of a formal scoping review on health system report cards. *Implement Sci.* 2010, 5: 2-10.1186/1748-5908-5-2.

Briggs, R. (1971). *Urban cognitive distances*. Unpublished doctoral thesis, Ohio State University, cited in Matlin M (1983) *Cognition*. New York Holt Rinehart and Winston.

Brown, D. & Ferrill, M.J. (2009). The Taxonomy of Professionalism: Reframing the Academic Pursuit of Professional Development. *American Journal of Pharmaceutical Education* 2009 July10 73(4):68.

Browning, L.D. and Shetler, J.C. (1992). 'Communication in crisis, communication in recovery: a postmodern commentary on the Exxon Valdez disaster', *International Journal of Mass Emergencies and Disasters*, 10(3), 477-498.

BS 11200 (2014). *BS 11200:2014, Crisis Management - Guidance and good practice*. Published by British Standards Limited, Chiswick, London 2014.

BS 65000 (2014). *BS 65000:2014 Guidance on organisational resilience*. Published by British Standards Limited, Chiswick, London 2014.

Bucks.ac (2018) retrieved from:

<https://bucks.ac.uk/courses/postgraduate/management-and-professional-studies/pt/organisational-resilience-pt>

Burnett, J. (1998). A Strategic Approach to Managing Crises. *Public Relations Review*, 24(4), 475-488.

Burt, R.S. (2005) *Brokerage and Closure: An Introduction to Social Capital*. Oxford University Press, New York, NY.

Burtles, J. & Yates, S. (1998). *Business Continuity Demystified*, an EPS Publication cited in *Continuity*, the Journal of the Business Continuity Institute vol 2 issue 3 pp10-11.

Bush, R.F.J. (2000). Staff are the Key to Successful Business Continuity Planning. In, *Finance and Management Today 2000* An Ambassador House Publication Newbury.

Business Continuity Institute (2012a). *Business Continuity Management – The Time is Now*, London: BCI.

Business Continuity Institute (2012b). *Engaging the Board*, London: BCI.

Business Continuity Institute (2012c). *Measuring BCM*, London: BCI.

Business Continuity Institute (2012d). *Safeguarding Reputation*, London: BCI.

Business Continuity Institute (2013). *Case Study: Yvonne Martin Beauty Clinic*, London: BCI.

Cabinet Office (2011). *Why Exercise Your Disaster Response?*, London: Cabinet Office.

Cabinet Office (2012a). *Emergency Preparedness*, London: Cabinet Office, Chapter 6: Business Continuity Management.

Cabinet Office (2012b). *Emergency Response and Recovery: Non Statutory Guidance Accompanying the Civil Contingencies Act 2004* (4th ed.), London: Cabinet Office.

Cabinet Office (2013a). *Emergency Planning and Preparedness: Exercises and Training*, London: Cabinet Office.

Cabinet Office (2013b). *National Risk Register for Civil Emergencies - 2013 Edition*, London: Cabinet Office.

Cadbury, A. (1992). *The Financial Aspects of Corporate Governance*, London: The Committee on the Financial Aspects of Corporate Governance and Gee and Co. Ltd.

Camon H (1907). *La Guerre Napoleonienne - les systemes d'operations*. Paris, Chapelot.

CBI (1999). *Business Continuity Management*. Managing Editor Reeves, J. Caspian Publishing, Millbank Tower London ISBN 1901844080.

Chopra, S. and Sodhi, MM.S. (2004) Managing Risk To Avoid Supply-Chain Breakdown FALL 2004 MIT SLOAN MANAGEMENT REVIEW
<https://sloanreview.mit.edu/article/managing-risk-to-avoid-supplychain-breakdown>

Christopher, M. (2016) *Logistics and Supply Chain Management* 5th Edn Pearson Education Ltd Edinburgh page 3

Civil Contingencies Secretariat (2013). *How Prepared Are You? Business Continuity Management Toolkit*, London: HM Government.

Clark, R.A. (2014). *In Hindsight, A compendium of Business Continuity case studies*. IT Governance Publishing, Ely, Cambridgeshire, UK.

Cockram, D., & Van Den Heuvel, C. (2012). *Crisis Management - What is it and how is it delivered*. BCI Partnership.

Cohen, D. & Prusak, L. (2001). *In Good Company: How Social Capital Makes Organizations Work*. Harvard Business School Press

Coleman, J.C. (1988) Social capital in the creation of human capital. *American Journal of Sociology* 94. S95-S120

Comte-Sponville, A. (2001). *A small treatise on the great virtues* (C. Temerson, Trans.). New York: Metropolitan Books.

Cox, S. and Tait, N. (1991). *Reliability, Safety and Risk Management: An Integrated Approach*, London: Butterworth-Heinemann.

Criscouli, E.J. (1988). The Time Has Come to Acknowledge Security as a Profession. *Annals (AAPSS)*, pp 498-499.

Currie, L. Devlin, F. Emde, J. and Graves, K. (2010) *Undergraduate search strategies and evaluation criteria: Searching for credible sources*, New Library World, Vol. 111 Issue: 3/4, pp.113-124, <https://doi.org/10.1108/03074801011027628>

Dadds, M. and Hart, S. (2001). *Doing Practitioner Research Differently* Routledge Falmer, London and New York.

Damer, T. (2009). *Attacking Faulty Reasoning: A Practical Guide to Fallacy-Free Arguments* 6th Edn Wadsworth Cengage Learning, Belmont CA USA.

Darling, J. (1994). Crisis Management in International Business: Keys to Effective Decision Making. *Leadership and Organisational Development Journal*, 15(8), 3-8.

de Bono E (1977). *Lateral Thinking*. Harmondsworth, Penguin.

Dembo, R.S. & Freeman A, (1998). *Seeing tomorrow: rewriting the rules of risk*. John Wiley and Sons, New York.

Denyer, D. (2017). *Organisational Resilience: A summary of academic evidence, business insights and new thinking*. BSI and Cranfield School of Management.

Department for Business, Energy, & industrial Strategy (2016). *Business population estimates for the UK and regions 2016*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559219/bpe_2016_statistical_release.pdf

Dominguez, C., Vidulich, M., Vogel, E. & McMillan, G. (1994). Situation awareness: Papers and annotated bibliography. Armstrong Laboratory, Human System Center, ref. AL/CF-TR-1994-0085.

DuBrin, A. (2013). *Handbook of Research on Crisis Leadership in Organisations*. Cheltenham: Edward Elgar Publishing Limited.

EBT ICAO Manual Doc 9995 First Edition (2013)

<https://www.osmaviationacademy.com/blog/core-competencies-for-pilots-situational-awareness>

EDUCAUSE Center for Applied Research (2007). IT and Business Continuity in Higher Education. ECAR Research Study 2, p. 155, EDUCAUSE Boulder, CO.

Ehrich K, Freeman G, Richards S, Robinson I, Shepperd S (2002). How to do a scoping exercise: continuity of care. *Res Pol Plan*. 2002, 20: 25-29.

Elliott, D and Smith, D. (2006). Cultural Readjustment After Crisis: Regulation and Learning from Crisis Within the UK Soccer Industry. *Journal of Management Studies*, 43: 289-317.

Elliott, D Swartz, E. and Herbane, B. (2002). Business continuity Management A crisis management approach 2nd edn, Routledge, London.

Elliott, D. Swartz, E. Herbane, B. (2010). *Business Continuity Management: A Crisis Management Approach*. 2ndEdn Routledge, Abingdon, Oxon.

Elliott, D. Johnson, N. (2010). *A Study of Resilience and Business Continuity Practice 2010*. Business Continuity Project Final report, University of Liverpool Management School.

Elsubbaugh, S., Fildes, R., & Rose, M. (2004). Preparation for Crisis Management: A Proposed Model and Empirical Evidence. *Journal of Contingencies and Crisis Management*, 12(3), 112-127.

Endsley, M. R. (1998). A comparative analysis of SAGAT and SART for evaluations of situation awareness. In *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting* (pp. 82-86). Santa Monica, CA: The Human Factors and Ergonomics Society.

Ennis, R.H. (1996). *Critical Thinking*. Prentice Hall, Upper Saddle River, NJ.

Evans L (2007). Professionalism, professionalism and professional development in *Lifelong Magazine* Retrieved from:
www.leeds.ac.uk/medicine/meu/lifelong07/Linda_Evans.pdf, School of Education, University of Leeds.

Evetts, J., Mieg H.A., & Felt, U. (2006). Professionalization, scientific expertise, and elitism: a sociological perspective. In K.A. Ericsson, N. Charness, P.J. Feltovich, & R.R. Hoffman (Eds), *The Cambridge handbook of expertise and expert performance* (pp. 105–126). Cambridge: Cambridge University Press.

Express BCP'. (2018). Retrieved from <http://www.expressbcp.com/>

Eyre, M., Crego, J. and Alison, L. (2008). 'Electronic debriefs and simulations as descriptive methods for defining the critical incident landscape' in L. Alison and J. Crego (eds) *Policing Critical Incidents: Leadership and Critical Incident Management*, Cullompton, Devon: Willan Publishing.

Feyerabend, P (1975). *Against Method: Outline of an Anarchistic Theory of Knowledge*, New York, Free Press.

Financial Reporting Council (2005). *Internal Control: Revised Guidance for Directors on the Combined Code*, London: FRC.

Financial Reporting Council (2012). *The UK Corporate Governance Code*, London: FRC.

Fischhoff, B. (1975). Hindsight does not Equal Foresight: The effect of outcome knowledge on judgment under uncertainty. *Journal of Experimental Psychology: Human Performance and Perception* 1975 1 288-299.

Fitzgerald, T. (2007). Documents and Documentary analysis: Reading between the lines. In *Research in Educational Research Leadership and Management* 2nd Edn, Eds Briggs, A.R.J. and Coleman, M. Sage Publications Limited London.

Flick (2006). Triangulation in Qualitative Research. In Flick, U, von Kardorf, E and Steinke, I. (Eds) *A Companion to Qualitative Research*. Sage, London.

Fragouli, E., Ioannidis, A., & Adiave Gaisie, A. (2013). Crisis Preparedness Plans: What influences the preparedness level of an organisation and examination whether petroleum companies have crisis management plans before crises occur. *International Journal of Chemical and Environmental Engineering*, 4(6), 363-372.

Frederick the Great (1747). Military Instructions for the Generals, Translated by Philips, T, in, *Roots of Strategy*, p189, Bodley Head 1943.

Fuller, J.F.C. (1993). *The Foundations of the Science of War*, (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1993. (Reprinted from the original 1926 edition).

- Ghiselin, B. (1952). *The Creative Process*. Berkeley: University of California Press.
- Gibbs, A. (2000). 'Practitioner evaluation', *Social Work Review*, 12, 2, 29-32.
- Gleeson, D Davies, J and Wheeler E (2005). p.3 On the Making and Taking of Professionalism in the Further Education (FE) Workplace. University of Warwick institutional repository: <http://go.warwick.ac.uk/wrap>
- Glucksberg, S. (1962). The influence of the strength of drive on functional fixedness and perceptual recognition. *Journal of Experimental Psychology* 10, 36-41.
- Graham, J. and Kaye, D, (2006). *A Risk Management Approach to Business Continuity*, Rothstein, P.J. Ed Publisher Rothstein Associates Brookfield Connecticut.
- Grant, M and Booth A. (2009). *A typology of reviews: An analysis of 14 review types and associated methodologies*. Health info Library J 2009 26:91-108.
- Gower, B, (1997). *Scientific Method, An Historical and Philosophical Introduction*. Routledge, Fetter Lane, London.
- Gov. UK. (2015). *Transparency in supply chain etc. A practical guide*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/471996/Transparency_in_Supply_Chains_etc__A_practical_guide__final_.pdf
- Gov.UK. (2016). *Preparing for emergencies*. Retrieved from <https://www.gov.uk/government/publications/preparing-for-emergencies/preparing-for-emergencies>
- Hall, T. (2001). 'Caught not Taught: ethnographic research at a young people's accommodation project' in I. Shaw and N. Gould *Qualitative Research in Social Work*. London: Sage Publications.
- Hempel, R. (1998). *Committee on Corporate Governance: Final Report*, London: The Committee on Corporate Governance and Gee Publishing Ltd.
- Heath, R. (1998). *Crisis Management for managers & executives* . London: Financial Times Management .
- Hiles A Ed (2011). *Definitive Handbook of Business Continuity Management*, J Wiley.

Hiles, A. (1999). In, *The Definitive Handbook of Business Continuity Management* eds A, Hiles and P, Barnes. John Wiley and Sons, Chichester.

Hiles, A. (2010). *The Definitive Handbook of Business Continuity Management* (3rd ed), Chichester: Wiley.

Hiles, A and Barnes, P. (Eds.) (1999). *The Definitive Handbook of Business Continuity Management*. John Wiley and Sons Ltd, Chichester.

Home Office (1999). *Dealing with Disaster* HMSO 3rd Edn 1999.

Home Office (2003). *Dealing With Disaster* (3rd ed), London: Home Office.

Home Office Communication Directorate (1996). *How resilient is your business to disaster?* Published on behalf of the Emergency Planning College, Easingwold, Yorks.

Horlick-Jones, T. (1990). *Acts of God? An Investigation into Disasters*, London: Association of London Authorities.

<https://www.gov.uk/government/publications/preparing-for-emergencies/preparing-for-emergencies>

Hudson L (1966). *Contrary Imaginations* Harmondsworth Penguin.

Hughes, D. J. (1993). *Moltke on the Art of War*. New York: Presidio Press.

ISO 22301 (2012). *ISO 22301:2012 Societal security- Business continuity management systems-Requirements*. Published by BSI Standards Limited. Chiswick, London 2014.

ISO 27031 (2011). *ISO IEC 27031:2011 Information technology- Security techniques- Guidelines for information and communication technology readiness for business continuity*. Published by British Standards Limited, Chiswick, London 2014.

ISO 22398 (2013). *ISO 22398:2013 Societal security- Guidelines for Exercises* Published by British Standards Limited Chiswick, London 2014.

ISO 28002 (2011). *ISO 28002:2011 Security management systems for the supply chain -- Development of resilience in the supply chain*. Published by British Standards Limited Chiswick, London 2014.

Jamieson, T. (2000). Crisis Management Teams: Dress Rehearsals are a Must. In *Finance and Management Today 2000* An Ambassador House Publication Newbury.

Janis I L (1982). *Groupthink Psychological Studies of Policy Decisions and Fiascos* 2nd Ed Houghton Mifflin Company Boston.

Jensen R.A. (2000). *Mass Fatality and Casualty Incidents: A field guide* CRC Press Boca Raton, Florida.

Joint Doctrine Note 3/11 (2011). *Decision Making and Problem Solving: Human and Organisational Factors* (2011) MOD Swindon.

Jones, D.P. de Villars, A.S. (2009), "Natural Justice and the Duty to be Fair", *Principles of Administrative Law* (5th ed.), Carswell, pp. 208–223 at 209, ISBN 978-0-7798-2126-6.

Kaplan H.B. (2005). Understanding the Concept of Resilience. In: Goldstein S., Brooks R.B. (eds) *Handbook of Resilience in Children*. Springer, Boston, MA.

Kahneman, D. & Tversky, A. (1979). Prospect Theory An analysis of decision under risk. *Econometrica* 47 263-291.

Kalmis, L. (2000). Why Exercise Business Continuity Plans? In *Finance and Management Today 2000* An Ambassador House Publication Newbury.

Kay, J. (2011). *Obliquity*. Profile Books Ltd. Pine Street, London.

Keane, S., Shaw, I. and Faulkner, A. (2003). 'Practitioner Research in Social Care: an Audit and Case Study Analysis', Report to Wales Office of Research and Development in Health and Social Care.

King, M. (1992). Planning for Workplace Emergencies. *Occupational Health* June 1992.

Kirk, S. and Reid, W. (2002). *Science and Social Work*, New York, Columbia University Press.

Kiszely, J.P (2006). The relevance of history to the military profession: a British view. in Murray, W and Sinnreich, R.H. (Eds) (2006) *The Past as Prologue: The Importance of History to the Military Profession*. Cambridge University Press.

Kitchenham, B. (2004). *Procedures for Performing Systematic Reviews*. Joint technical Report, Software Engineering Group Department of Computer Science Keele University Technical Report TR/SE-0401.

Klein, R., Nicholls R., and Thomalla (2004). Resilience to Natural hazards: How useful is this concept?' *Global Environmental Change Part B: Environmental Hazards*, Volume 5, Issues 1-2, 35-45.

Knight, R.F and Pretty, D. J. (1997). *The Impact of Catastrophes on Shareholder Value* A Research Report Sponsored by Sedgwick Group The Oxford Executive Research Briefings Templeton College, University of Oxford, Oxford OX1 5NY, England.

Kuhn, T.S. (1996) *The Structure of Scientific Revolution*, 3rd edition. University of Chicago Press, Chicago.

Kwesi-Buor, J., Menachof, D., & Talas, R. H. A. (2016). Scenario analysis and disaster preparedness for port and maritime logistics risk management. *Accident Analysis & Prevention*. <https://doi.org/10.1016/j.aap.2016.07.013>

Lagadec, P. (1997). Learning Processes for Crisis Management in Complex Organisations. *Journal of Contingencies and Crisis Management*, 5: 24–31.

Larson, M. S. (1977). *The Rise of Professionalism A Sociological Analysis*. University of California Press Berkeley 94720.

Lengnick-Hall, C. A. Beck, T. E. & Lengnick-Hall, M. L. (2011). Developing a capacity for organisational resilience through strategic human resource management. *Human Resource Management Review*, 21, 243-255.

Levac, D Colquhoun, H. and O'Brien, K.K. (2010). *Scoping Studies: advancing the methodology*. *Implementation Science* 2010 5:69.

Lindblom, C. (1959). The Science of Muddling Through. *Public Administration Review*, vol 19, no 2, 1959

Lindstedt, D. (2007). Grounding the discipline of business continuity planning: What needs to be done to take it forward? *Journal of Business Continuity & Emergency Planning*, Vol2 No 2, pp197-205, Henry Stewart Publications 1749-9216.

Lofland, J. (1971). *Analysing Social Settings*. Belmont, CA: Wadsworth.

Lopes, L.L. (1987). Between Hope and Fear: The Psychology of Risk. *Advances in Experimental Psychology Vol 20* Academic Press Inc 1987.

Luce, R.D. and Raiffa, H. (1990). Utility Theory in, *Rationality. In, Action; Contemporary. Approaches*, Ed Moser, K.P. Cambridge University Press Cambridge UK.

Macfarlane and Another v. Tayside Health Board (Scotland) [1999] UKHL 50; [2000] 2 AC 59; [1999] 4 All ER 961 (25th November, 1999).

McAslan, A. (2010). The Concept of Resilience. Understanding its Origins, Meaning and Utility.

McGee, A. (2006). *Corporate security's professional project: an examination of the modern condition of corporate security management, and the potential for further professionalisation of the occupation*. Unpublished Master's thesis, Cranfield University, Shrivenham.

McIlwraith, A. (1999). Contingency plans? Ignore them and thrive. In *Secure Computing* June 1999.

McIvor, G. (1995). 'Practitioner Research in Probation' in McGuire, J. (ed) *What Works? Reducing Offending*. New York, Willey.

McLeod, J. (1999). *Practitioner Research in Counselling*, London, Sage Publications

Merriman, S.B. (1998). *Case study research in education: A qualitative approach*. San Francisco Jossey-Bass.

Microsoft Search Network (2000). Amazon.com (1999).

www.amazon.com/exec/obidos/search-handle-form/150600

Miller, G.A. (1956). The Magical Number Seven, Plus or Minus Two: Some limits on our capacity for processing information. *Psychological Review*, 63, pp 81-97.

Mingers, J. (2000). 'What it is to be critical? Teaching a critical approach to management undergraduates'. *Management Learning*, Vol 31, No.2, pp 219-37

Mitchell, V. (1996). 'Assessing the reliability and validity of questionnaires; an empirical example,' *Journal of Applied Management Studies*, 5:2, 199-207.

Morgan, G. (1986). *Images of Organisation* Sage Publications London

Morillo, S. with Pavkovic, M.F. (2017). *What is Military History?* 3rd Edn. Polity Press Cambridge, UK.

Morris, C. (1996). *Quantitative Approaches in Business Studies*, 4thEdn. Pitman Publishing London.

Nagel, J. (2005). *Learning to Eat Soup with a Knife*, University of Chicago Press.

Nahapiet, J & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *The Academy of Management Review*. 23. 10.2307/259373.

Nash, T. (2000). *Business Continuity: Helping Directors build a strategy for a secure future*. Ed T Nash. Director Publications Ltd. London.

Needham-Bennett, C. (2011). *Lexcel Business Continuity Planning Toolkit*. The Law Society, Law Society Publishing, Chancery Lane London.

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American journal of community psychology*, 41(1-2), 127-150.

Norrman, A. and Jansson, U. (2004). Ericsson's proactive supply chain risk management approach after a sub-supplier accident. *International Journal of Physical Distribution and Logistics Management*, 34(5), 434-456 DOI 10.1108/09600030410545463

Parnell, J. (2014). Crisis Management and Strategic Orientation in Small and Medium-Sized Enterprises (SMEs) in Peru, Mexico and the United States. *Journal of Contingencies and Crisis Management*.

Pauchant, T.C. and Douville, R. (1992). Recent research in crisis management: A study of 24 authors' publications from 1986 to 1991 *Industrial and Environmental Crisis Quarterly* 7:43-66.

Peirce, C.S. (1934). *The Fixation of Belief in Collected Papers of Charles Sanders Pierce*, ed. Charles Hartshorne and Paul Weiss (Cambridge, MA: The Belknap Press of Harvard University Press 1934) Vol.223.

Perkin, H. (1989). *The Rise of Professional Society: England Since 1880*, Routledge London.

Perrow, C. (1967). *A framework for the comparative analysis of organisations*. *American Sociological Review* 32 pp 194-208.

Perrow, C. (1999). *Normal Accidents: Living with High-Risk Technologies*, New York: Princeton University Press.

Perrow, C. (2011). *Normal accidents: Living with high risk technologies*. Princeton University Press, 2011.

Peters, T.J. & Waterman R.H. (1982). *In Search of Excellence*. Harper and Row, New York.

Pitt, M. and Goyal, S. (2004). Business Continuity Planning as a Facilities Management Tool. *Facilities*, Volume 22, number3/4 2004 pp87-99 Emerald Group Publishing Limited.

Popper, K. (1957). *The Poverty of Historicism*. Routledge and Kegan Paul London

Power, P. (1999). *Business Continuity Management: Preventing Chaos in a Crisis*. Department of Trade and Industry DTI Admail 528 URN 99/849.

Proctor, M. (1993). in *Researching Social Life* Ed Gilbert, N.(1994) Sage Publications London.

Quarantelli, E.L. (1995). What is a Disaster? *International journal of mass Emergencies and Disasters*, 13 (3) 221-229.

Quarantelli, E.L. (1996). *Ten Criteria for Evaluating the Management of Community Disasters*, Disaster Research Center, University of Delaware, Newark, Delaware. 197 16 USA pp5-18.

Reason, J. (1990). *Human Error*. Cambridge University Press.

Reason, J. (1997). *Managing the Risks of Organisational Accidents*, Ashgate, Aldershot.

Regeester, M. (1987). *Crisis Management*. London: Hutchinson Business.

Reid, W. (1995). 'Research Overview' in R.L. Edwards and J.G. Hopps (eds) *Encyclopaedia of Social Work*. 19th Edition, Volume III, Washington DC, NASW Press.

Remenyi, D. Williams, B. Money, A. and Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method*, London, Sage.

Reynolds, P.P. (1994). Reaffirming professionalism through the education community. *Ann Intern Med*. 1994;120(7):609–14. [PubMed]

Rittel, H.W.J. and Webber, M.M. (1973). Dilemmas in a General Theory of Planning, *Policy Sciences* 4, pp. 155-169. Elsevier Scientific Publishing Company Scotland.

Ritzer, G. (2008). *The MacDonaldization of Society* 5. Pine Forge Press an Imprint of Sage Publications, Thousand Oaks, California.

Robson, C. & McCartan, K. (2016). *Real World Research: A resources for users of social research methods in applied settings*. 4th Edn John Wiley and Sons Ltd, Chichester.

Rosenthal, U., Arjen Boin, R., & Comfort, L. K. (2001). *Managing Crises: Threats, Dilemmas, Opportunities*. Springfield: Charles C Thomas.

Rutter M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598 – 611.

Saarinen T F (1973). The use of projective techniques in geographic research. In: WH Ittelon (ed) *Environment and Cognition*. New York, Seminar Press.

Sagan, C. (1974). *Broca's Brain: Reflections on the romance of science*. Ballantine Books, New York.

Patel, S. (2015). *The research paradigm – methodology, epistemology and ontology – explained in simple language*. Retrieved from <http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language>.

Saunders, M Lewis, P and Thornhill, A. (2009). *Research Methods for Business Students* 5th Edn FT Prentice Hall, Pearson Education, Harlow, England.

Saunders, M. Lewis, P and Thornhill, A. (2003). *Research Methods for Business Students*. 3rdEdn Pearson Education Limited, Harlow.

Scafetta, N. (2012). Testing an astronomically based decadal-scale empirical harmonic climate model versus the general circulation climate models. [*J. Atmos. Sol.–Terr. Phys.* (2012) 124–137]).

Shaw, I. (2002). '*Practitioner Research: Evidence or Critique*' International Inter Centre Network for Social Research, Columbia University, New York.

Shaw, I. (2003). 'Cutting edge issues in social work research', *British Journal of Social Work*, 33, 1, 107-116.

Shaw, I. (2005). 'Practitioner research: evidence or critique?', *British Journal of Social Work*, 35, 8, 1231-1248.

Shaw, I. and Norton, M. (2007). *The kinds and quality of social work research in UK universities*. Using Knowledge in Social Care - Report 17.

Sheffi, Y. (2001) Supply Chain Management under the Threat of International Terrorism, *The International Journal of Logistics Management*, Vol. 12 Issue: 2, pp.1-11, <https://doi.org/10.1108/09574090110806262>

Simonsen, C. (1996). The case for: security management is a profession. *International Journal of Risk, Security and Crime Prevention*, 1(3), 229–232.

Sims B. (2010). Resilience and Homeland Security: Patriotism, Anxiety, and Complex System Dynamics, Los Alamos National Laboratory.

Slovic, P. (1987). Perception of Risk, *Science Translational Medicine* 236 (4799) 280-285 [doi: 10.1126/science. 3563507].

Smith, J. (2013). Strategic continuity planning: The first critical step. *Journal of Business Continuity and Emergency Planning*, 7(1), 6-12.

Smith, D and Elliott, D (Eds.) (2006). *Key Readings in Crisis Management*. Abingdon, Oxon, Routledge.

Societal Security-Business continuity management systems - Guidance ISO 22313 (2012) E 1st Edition, British Standards Limited 2012 Chiswick, London.

Societal Security-Business continuity management systems - Requirements ISO 22301 (2012) E 1st Edition, British Standards Limited 2012 Chiswick, London.

Springett, P. (1996). A time to fit new shock absorbers. In *Windows on Finance*, March 1996, pp22-25, A Euromoney Publication ISSN1360-9165.

Sterling, S. Duddridge, B. Elliott, A Conway, M. & Payne, A. (2012). *Business Continuity for Dummies*. John Wiley and Sons Ltd, Chichester, West Sussex.

Stewart, D.W. (1984). *Secondary Research: Information Sources and Methods*. Beverley Hills, CA: Sage

The Army Field Manual (1985). Volume 1 The Fundamentals Part 1 The Application of Force 1985 MOD Swindon.

Taleb, N.N. (2010). *The Black Swan: The Impact of the Highly Improbable*. Penguin

Books Ltd, Strand, London.

Toft B & Reynolds S (1997). *Learning from Disasters: A Management Approach*, 2nd Edn, Perpetuity Press Ltd, Leicester.

Toft, B. and Reynolds, S. (2005). *Learning from Disasters: A Management Approach* (3rd ed), Oxford: Butterworth-Heinemann.

Tom, D. and Barrons, R. (2006). *The Business General*. Vermillion, Random House Limited, London.

Turnbull, N. (1999). *Internal Control: Guidance for Directors on the Combined Code*, London: The Institute of Chartered Accountants in England and Wales.

Turner, B. (1978). *Man-Made Disasters*, London: Wykeham.

Tversky, A and Kahneman, D. (1974) Judgement under uncertainty: Heuristics and biases. *Science*, 1974, 185, 1124-1131 American Association for the Advancement of Science.

Tversky, A. and Kahneman, D. (1992). *Advances in prospect theory: Cumulative representation of uncertainty*". *Journal of Risk and Uncertainty*. 5 (4): 297–32.

UCISA (undated). UCISA Business Continuity Best Practice Guide Draft Outline V 12 obtained from Hull University Registrar.

UK Public Spending (2017) retrieved from
https://www.ukpublicspending.co.uk/uk_defence_spending_30.html

Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly* 42. 35-67. 10.2307/2393808.

Van Happeren, K. (1999). Business Continuity Planning: Magic or Myth? In Business Process Risk Management section of *InfoRM*. May-June, 1999 pp19-22.

de Vaus D.A. (2005) *Research Design in Social Science* Sage Publications London

Veloski J, Sylvia MS, Fields, K. EdD, RN, Boex, J.R. and Blank, L.L. (2005) Measuring Professionalism: A review of studies with instruments reported in literature between 1982 and 2002. *Academic Medicine* Vol 80 No4 April 2005

von Clausewitz, C. (1976). *On War*. Edited and translated by Howard, M. and Paret, P. Princeton UP, New Jersey, 1976.

von Schmerfeld, F. (1925). *General Field Marshall Graf von Moltke*. Berlin, Verlag, Reimar Hobbering.

Wagenaar, W.A. & Groeneweg, J. (1988). Accidents at sea: multiple causes and impossible consequences. *International journal of man and machine Studies*, 1987 27 587-598.

Wallace, M. and Wray, A. (2006). *Critical Reading and Writing for Postgraduates*. London: Sage.

Walker, B. Holling, C.S. Carpenter, S.R. and Kinzig, A. (2004). Resilience, adaptability and transformability in social–ecological systems. *Ecology and Society* 9 (2): 5. Retrieved from: <http://www.ecologyandsociety.org/vol9/iss2/art5/>

Walsall City Council (2018). Retrieved from, <http://walsallemergencyplanning.co.uk/business-continuity/>

Wason, P. C. (1968). Reasoning about a rule. *The Quarterly Journal of Experimental Psychology*, 20, 273-281.

Wason, P. C. & Johnson -Laird, P. N. (1970). A Conflict Between selecting and evaluating Information in an inferential task. *British Journal of Psychology* 61, 509-515.

Wells, C. (1995). *Negotiating Tragedy: Law and Disasters* Sweet and Maxwell, London.

Westley, F. and Mintzberg, H. (1989). Visionary Leadership and Strategic Management, *Strategic Management Journal*, Vol 10, 17-32 (1989).

Whittingham, I. (2000). The Future of Risk Management in *Finance and Management Today 2000*. An Ambassador House Publication, Newbury.

Wildavsky, A. (1979). *Am Sci* 67,32.

Wohlstetter, R. (1962). *Pearl Harbour Warning and Decision*. Stanford (Calif), Stanford University Press.

Wong, W,N.Z. (2009) The strategic skills of business continuity managers: Putting business continuity management into corporate long term planning. *Journal of Business Continuity & Emergency Planning*. Vol 4 No1, pp 62-68 Henry Stewart Publications. Museum Street, London.

World Bank Group (2017). Military expenditures (% of GDP). Retrieved from <https://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS?locations=GB>.

Yin, R.K. (1994). *Case study research: Design and methods*. 2nd Edn, Sage, Thousand Oaks, C.A.

Zikmund, W.G. (2000). *Business Research Methods*, (6th edn), Fort Worth, TX, Dryden Press.

Zsidisin GA * Melnyk SA & G. Ragatz L (2007). An institutional theory perspective of business continuity planning for purchasing and supply management. pages 3401-3420 *International Journal of Production Research* Volume 43, Issue 16, 2005

Annex A. Ethical Certificate

To: The plight of the planner: A consideration of the quality and consequent utility of the literature on business continuity/resilience (BCR) to inform 'professional' practice.

Certificate Code: 8ED6-814F-B977-F704-546C-5F85-9DD4-CDFD Page 1

Certificate of Ethics Review

Project Title: The Plight of the Planner: An examination of the literature informing planning in business resilience

User ID: 677496

Name: Chris Needham-Bennett

Application Date: 14/10/2016 11:29:10

You must download your certificate, print a copy and keep it as a record of this review.

It is your responsibility to adhere to the University Ethics Policy and any Department/School or professional guidelines in the conduct of your study including relevant guidelines regarding health and safety of researchers and University Health and Safety Policy.

It is also your responsibility to follow University guidance on Data Protection Policy:

☐ ☐ General guidance for all data protection issues

☐ ☐ University Data Protection Policy

You are reminded that as a University of Portsmouth Researcher you are bound by the

UKRIO Code of Practice for Research; any breach of this code could lead to action being

taken following the University's Procedure for the Investigation of Allegations of Misconduct in Research.

Any changes in the answers to the questions reflecting the design, management or conduct of the research over the course of the project must be notified to the Faculty Ethics Committee. Any changes that affect the answers given in the questionnaire, not reported to the Faculty Ethics Committee, will invalidate this certificate.

This ethical review should not be used to infer any comment on the academic merits or

methodology of the project. If you have not already done so, you are advised to develop

a clear protocol/proposal and ensure that it is independently reviewed by peers or others

of appropriate standing. A favourable ethical opinion should not be perceived as permission to proceed with the research; there might be other matters of governance which require further consideration including the agreement of any organisation hosting the research.

GovernanceChecklist

A1-BriefDescriptionOfProject: Many £m is spent on business resilience planning. Most of the planning is based on the available literature. However, the literature is often of questionable validity. The study seeks to examine the literature to determine what utility and validity various documents and processes contain. The work is based on practitioner research using only secondary sources.

A2-Faculty: FHSS

A3-VoluntarilyReferToFEC: No

A5-AlreadyExternallyReviewed: No

Certificate Code: 8ED6-814F-B977-F704-546C-5F85-9DD4-CDFD Page 2

B1-HumanParticipants: No

HumanParticipantsDefinition

B2-HumanParticipantsConfirmation: Yes

B4-InvolvesNHSPatients: No

B5-NoConsentOrDeception: No

InvolvesNoConsentOrDeceptionWarning

B7-InvolvesUninformedOrDependents: No

InvolvesUninformedOrDependentsWarning

B9-FinancialInducements: No

FinancialInducementsWarning

C1-DrugsPlacebosOrOtherSubstances: No

C2-BloodOrTissueSamples: No

C3-PainOrMildDiscomfort: No

C4-PsychologicalStressOrAnxiety: No

C5-ProlongedOrRepetitiveTesting: No

C6-SafetyRisksBeyondAssessment: No

D2-PhysicalEcologicalDamage: No

PhysicalEcologicalDamageWarning

D4-HistoricalOrCulturalDamage: No

HistoricalOrCulturalDamageWarning

E1-ContentiousOrIllegal: No

E2-SociallySensitiveIssues: No

F1-InvolvesAnimals: No

InvolvesAnimalsWarning

F2-HarmfulToThirdParties: No

HarmfulToThirdPartiesWarning

G1-ConfirmReadEthicsPolicy: Confirmed

G2-ConfirmReadUKRIOCodeOfPractice: Confirmed

G3-ConfirmReadConcordatToSupportResearchIntegrity: Confirmed

G4-ConfirmedCorrectInformation: Confirmed